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WEST Search History

DATE: Friday, September 26, 2003

Set Name side by side	Query	Hit Count S	Set Name result set
DB=PGPB; THI	ES=ASSIGNEE; PLUR=YES; OP=ADJ		
L3	lipase same bacillus same pumilus	38	L3
DB=USPT,JPAE	B,EPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ		
L2	lipase same bacillus same pumilus	80	L2
DB=USPT,PGP. OP=ADJ	B,JPAB,EPAB,DWPI; THES=ASSIGNEE; PLUR=YES;		
L1	lipase same bacillus same pumilus	118	L1

END OF SEARCH HISTORY

WEST

Generate Collection

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Search Results - Record(s) 1 through 20 of 80 returned.

1. Document ID: US 6623950 B1

L2: Entry 1 of 80

File: USPT

Sep 23, 2003

US-PAT-NO: 6623950

DOCUMENT-IDENTIFIER: US 6623950 B1

TITLE: Modified enzymes having polymer conjugates

DATE-ISSUED: September 23, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY von der Osten; Claus Lyngby DK
Olsen; Arne Agerlin Virum DK
Roggen; Erwin Ludo Lyngby DK

US-CL-CURRENT: 435/220; 435/221, 435/252.3, 435/320.1, 435/471, 435/69.1, 510/320,

<u>536/23.2</u>

ABSTRACT:

The present invention relates to polypeptide-polymer conjugates having added and/or removed one or more attachment groups for coupling polymeric molecules on the surface of the polypeptide structure, a method for preparing polypeptide-polymer conjugates of the invention, the use of said conjugates for reducing the immunogenicity and allergenicity and compositions comprising said conjugate.

11 Claims, 1 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC
Draw, D	esc	Image									

2. Document ID: US 6623948 B1

L2: Entry 2 of 80

File: USPT

Sep 23, 2003

US-PAT-NO: 6623948

DOCUMENT-IDENTIFIER: US 6623948 B1

TITLE: Nucleic acid sequences encoding alkaline alpha-amylases

DATE-ISSUED: September 23, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Outtrup; Helle	Vaerlose			DK
Hoeck; Lisbeth Hedegaard	Frorup			DK
Nielsen; Bjarne Ronfeldt	Virum			DK
Borchert; Torben Vedel	Copenhagen			DK
Nielsen; Vibeke Skovgaard	Bagsvaerd			DK
Bisg.ang.rd-Frantzen; Henrik	Bagsvaerd			DK
Svendsen; Allan	Birkerod			DK
Andersen; Carsten	Vaerlose			DK

US-CL-CURRENT: $\frac{435}{202}$; $\frac{435}{252.3}$, $\frac{435}{254.11}$, $\frac{435}{320.1}$, $\frac{435}{325}$, $\frac{435}{419}$, $\frac{536}{23.1}$, $\frac{536}{23.2}$, $\frac{536}{23.7}$

ABSTRACT:

The present invention relates to isolated nucleic acid sequences encoding polypeptides having alpha-amylase activity [E.C. 3.2.1.1], which may be derived from Bacillus. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

13 Claims, 9 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 9

Full Title	: Citation	Front	Classification		Attachments
Drawi Desc	Image				

KWIC

3. Document ID: US 6617143 B1

L2: Entry 3 of 80

File: USPT

Sep 9, 2003

US-PAT-NO: 6617143

DOCUMENT-IDENTIFIER: US 6617143 B1

TITLE: Polypeptides having glucanotransferase activity and nucleic acids encoding same

DATE-ISSUED: September 9, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Fukuyama; Shiro Chiba JP

US-CL-CURRENT: $\frac{435}{193}$, $\frac{435}{183}$, $\frac{435}{252.3}$, $\frac{435}{262}$, $\frac{435}{263}$, $\frac{435}{320.1}$, $\frac{435}{69.2}$, $\frac{510}{114}$, $\frac{536}{23.2}$, $\frac{536}{23.7}$

ABSTRACT:

The present invention relates to isolated polypeptides having glucanotransferase activity and isolated nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

21 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4 Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments |
Draw, Desc | Image |

KMC

4. Document ID: US 6617026 B2

L2: Entry 4 of 80

File: USPT

Sep 9, 2003

US-PAT-NO: 6617026

DOCUMENT-IDENTIFIER: US 6617026 B2

TITLE: Particles containing active in visco-elastic liquids

DATE-ISSUED: September 9, 2003

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Bach; Poul

Birker.o slashed.d

DK

US-CL-CURRENT: 428/402; 427/212, 427/213, 427/213.31, 428/402.2, 428/403, 428/407

ABSTRACT:

The present invention relates to a particle comprising an active dispersed in a visco-elastic liquid matrix having a .eta.' and a .eta." between 10.sup.3 to 10.sup.14 Pa measured in a cone-and-plate rheometer at 25.degree. C. and a sinusoidal frequencies .omega. of 1 Hz.

20 Claims, 0 Drawing figures Exemplary Claim Number: 1



KWIC

5. Document ID: US 6608018 B1

L2: Entry 5 of 80

File: USPT

Aug 19, 2003

US-PAT-NO: 6608018

DOCUMENT-IDENTIFIER: US 6608018 B1

TITLE: Polypeptides having branching enzyme activity and nucleic acids encoding same

DATE-ISSUED: August 19, 2003

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Shinohara; Mari L.

Brookline

MA

US-CL-CURRENT: 510/392; 435/193

ABSTRACT:

The present invention relates to isolated polypeptides having branching enzyme activity and isolated nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

18 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full Title Citation Front Review Classification Date Reference Sequences Attachments

Draw, Desc Image

KWIC

6. Document ID: US 6605458 B1

L2: Entry 6 of 80

File: USPT

Aug 12, 2003

US-PAT-NO: 6605458

DOCUMENT-IDENTIFIER: US 6605458 B1

TITLE: Protease variants and compositions

DATE-ISSUED: August 12, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Hansen; Peter Kamp Lejre DK
Bauditz; Peter K.o slashed.benhaven DK
Mikkelsen; Frank Valby DK

US-CL-CURRENT: $\frac{435}{220}$; $\frac{435}{221}$, $\frac{435}{222}$, $\frac{435}{252.3}$, $\frac{435}{320.1}$, $\frac{435}{471}$, $\frac{435}{69.1}$, $\frac{510}{350}$, $\frac{536}{23.2}$

<u>===</u>, <u>===</u>, <u>===</u>,

ABSTRACT:

A protease subtilase enzyme, characterized by an insertion in at least one active site loop. The enzymes exhibit improved wash performance in a detergent in comparison to its parent enzyme if it is a subtilase variant.

77 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4

Front Keview	Classification	Date	Reference	Sequences	Attachments
	Front Review	Front Review Classification	Front Review Classification Date	Front Review Classification Date Reference	Front Review Classification Date Reference Sequences

KWIC

7. Document ID: US 6592867 B2

L2: Entry 7 of 80

File: USPT

Jul 15, 2003

US-PAT-NO: 6592867

DOCUMENT-IDENTIFIER: US 6592867 B2

TITLE: Antimicrobial composition containing an oxidoreductase and an enhancer of the

N-hydroxyanilide-type

DATE-ISSUED: July 15, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

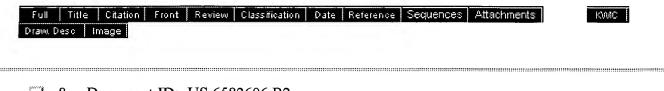
Johansen; Charlotte Holte DK
Deussen; Heinz-Josef Soeborg DK

US-CL-CURRENT: 424/94.4; 435/189, 435/190, 435/191, 435/192, 435/262

ABSTRACT:

The present invention relates to an enzymatic composition capable of killing or inhibiting microbial cells or micro-organisms, e.g. in laundry, on hard surfaces, in water systems, on skin, on teeth or on mucous membranes. The present invention also relates to the use of said enzymatic composition for preserving food products, cosmetics, paints, coatings, etc.

16 Claims, 3 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 3



8. Document ID: US 6582606 B2

L2: Entry 8 of 80

File: USPT

Jun 24, 2003

US-PAT-NO: 6582606

DOCUMENT-IDENTIFIER: US 6582606 B2

TITLE: Microfiltration using activated carbon

DATE-ISSUED: June 24, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP COD	E COUNTRY
Laustsen; Mads Aage	Lyngby		DK
Nielsen; S.o slashed.ren Bo	V.ae butted.rl.o slashed.se		DK
Jakobsen; Sune	V.ae butted.rl.o slashed.se		DK
Hansen; Kim Uhre	Kalundborg		DK .

US-CL-CURRENT: 210/639; 210/651, 210/652, 210/774, 435/183, 530/412

ABSTRACT:

A microfiltration process of a fermentation-derived product comprising adding activated carbon to a solution of the fermentation-derived product prior to or during the microfiltration process at a microfiltration process temperature of from 25.degree. C. to 65.degree. C.

15 Claims, 0 Drawing figures Exemplary Claim Number: 1

L2: Entry 9 of 80

File: USPT

May 13, 2003

US-PAT-NO: 6562585

DOCUMENT-IDENTIFIER: US 6562585 B1

TITLE: Beneficial bacterial preparation and method

DATE-ISSUED: May 13, 2003

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Hiatt; William N. Long Beach CA 90807

US-CL-CURRENT: 435/42

ABSTRACT:

A method and mixture for denitrifying aerobic bacterial compositions and for aerobic methods for biological treatment of aqueous systems polluted by nitrogen waste products.

A mixture of and limited to bacillus bacteria are added to the treatment subject.

Optionally enzymes can be added to the mixture.

Optionally a particulate carbon ingredient can be placed into the treatment subject.

Optionally a living tissue ingredient can be used.

5 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw, D	esc l	mage							•

KAMC

10. Document ID: US 6558939 B1

L2: Entry 10 of 80

File: USPT

May 6, 2003

US-PAT-NO: 6558939

DOCUMENT-IDENTIFIER: US 6558939 B1

TITLE: Proteases and variants thereof

DATE-ISSUED: May 6, 2003

INVENTOR - INFORMATION:

NAME	CITY	STATE	ZIP	CODE	COUNTRY
N.o slashed.rregaard-Madsen; Mads	Odense				DK
.O slashed.stergaard; Peter Rahbek	Virum				DK
Christensen; Claus Bo V.o slashed.ge	Snekkersten				DK
Lassen; S.o slashed.ren Flensted	K.o slashed.benhavn				DK

US-CL-CURRENT: $\frac{435}{222}$; $\frac{435}{252.3}$, $\frac{435}{320.1}$, $\frac{435}{471}$, $\frac{435}{69.1}$, $\frac{510}{350}$, $\frac{536}{23.2}$

ABSTRACT:

Novel isolated proteases of the RP-II type and variants of RP-II proteases exhibiting improved properties in comparison to the parent RP-II protease, DNA constructs and vectors coding for the expression of said proteases and variants, host cells capable of expressing the proteases and variants from the DNA constructs, as well as a method of producing them by cultivating said host cells. The proteases may advantageously be used as constituents in detergent compositions and additives, optionally in combination with

other enzymes such as proteases, lipases, cellulases, amylase, peroxidases or oxidases.

27 Claims, 5 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	K
Draw, D	esc li	mage								

11. Document ID: US 6558938 B1

L2: Entry 11 of 80 File: USPT May 6, 2003

US-PAT-NO: 6558938

DOCUMENT-IDENTIFIER: US 6558938 B1

TITLE: Protease variants and compositions

DATE-ISSUED: May 6, 2003

INVENTOR-INFORMATION:

CITY STATE ZIP CODE NAME COUNTRY Hansen; Peter Kamp Lejre DΚ Bauditz; Peter Soborg DK Mikkelsen: Frank Valby DK Andersen; Kim Vilbour Copenhagen DK

US-CL-CURRENT: 435/221; 435/252.31, 435/320.1, 435/471, 435/69.1, 510/306, 536/23.2

ABSTRACT:

Enzymes produced by mutating the genes for a number of subtilases and expressing the mutated genes in suitable hosts are presented.

The enzymes exhibit improved wash performance in any detergent in comparison to their wild type parent enzymes.

20 Claims, 1 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification		Reference	Sequences	Attachments
Full	litte	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachmen

KMAC

12. Document ID: US 6555355 B1

L2: Entry 12 of 80 File: USPT Apr 29, 2003

US-PAT-NO: 6555355

DOCUMENT-IDENTIFIER: US 6555355 B1

TITLE: Protease variants and compositions

DATE-ISSUED: April 29, 2003

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Hansen; Peter Kamp Lejre DK DK Bauditz; Peter S.o slashed.borg DK Mikkelsen; Frank Valby Andersen; Kim Vilbour Copenhagen DK

US-CL-CURRENT: 435/221; 435/252.31, 435/320.1, 435/471, 435/69.1, 510/306, 536/23.2

ABSTRACT:

Enzymes produced by mutating the genes for a number of subtilases and expressing the mutated genes in suitable hosts are presented.

The enzymes exhibit improved wash performance in any detergent in comparison to their wild type parent enzymes.

20 Claims, 2 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 2

Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	K00
İ	Title	Title Citation	Title Citation Front	Title Citation Front Review	Title Citation Front Review Classification	Title Citation Front Review Classification Date	Title Citation Front Review Classification Date Reference	Title Citation Front Review Classification Date Reference Sequences	Title Citation Front Review Classification Date Reference Sequences Attachments

13. Document ID: US 6548278 B1

L2: Entry 13 of 80

File: USPT

Apr 15, 2003

MC

US-PAT-NO: 6548278

DOCUMENT-IDENTIFIER: US 6548278 B1

TITLE: Enzymatic hydrolysis of cyclic oligomers

DATE-ISSUED: April 15, 2003

INVENTOR-INFORMATION:

CITY NAME STATE ZIP CODE COUNTRY Riegels; Martin Leichlingen DE Koch; Rainhard Koln DE Pedersen; Lars Saaby Farum DK Lund; Henrik Raleigh NC

US-CL-CURRENT: 435/135; 435/134, 435/136, 435/145, 435/196

ABSTRACT:

The present invention relates to a process for enzymatic hydrolysis of cyclic oligomers of poly(ethylene terephthalate), which process comprises subjecting the cyclic oligomer to the action of one or more lipolytic and/or biopolyester hydrolytic enzyme(s).

10 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Frent	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
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14. Document ID: US 6544297 B1

L2: Entry 14 of 80

File: USPT

Apr 8, 2003

US-PAT-NO: 6544297

DOCUMENT-IDENTIFIER: US 6544297 B1

TITLE: Single-bath biopreparation and dyeing of textiles

DATE-ISSUED: April 8, 2003

INVENTOR-INFORMATION:

NAME

ZIP CODE STATE NC

COUNTRY

Liu; Jiyin Condon; Brian

Wake Forest

NC

Showmaker, III; Harry Lee

Raleigh

Raleigh

CITY

NC

US-CL-CURRENT: 8/401; 8/111, 8/139

ABSTRACT:

The present invention provides methods for single-bath biopreparation and dyeing of cellulosic fibers, which are carried out by contacting the fibers simultaneously or sequentially with a bioscouring enzyme, preferably pectinase, protease, and/or lipase, and a dyeing system, under conditions that do not require emptying the bath or rinsing the fabric between biopreparation and dyeing steps.

25 Claims, 2 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KMIC

15. Document ID: US 6528298 B1

L2: Entry 15 of 80

File: USPT

Mar 4, 2003

US-PAT-NO: 6528298

DOCUMENT-IDENTIFIER: US 6528298 B1

TITLE: .alpha.-amylase mutants

DATE-ISSUED: March 4, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Svendsen; Allan Birkerod DK Borchert; Torben Vedel Copenhagen DK Bisgard-Frantzen; Henrik Bagsvaerd DK Outtrup; Helle Ballerup DK Nielsen; Bjarne Ronfeldt Virum DK Nielsen; Vibeke Skovgaard Bagsv.oe butted.rd DK Hedegaard; Lisbeth Skodsborg DK

 $\text{US-CL-CURRENT: } \underline{435/202}; \ \underline{435/183}, \ \underline{435/200}, \ \underline{435/201}, \ \underline{435/252.3}, \ \underline{435/320.1}, \ \underline{435/69.1}, \\ \underline{435/201}, \ \underline{4$ <u>536/23.2</u>, <u>536/23.7</u>

ABSTRACT:

The invention relates to a novel Termamyl-like .alpha.-amylase, and Termamyl-like .alpha.-amylases comprising mutations in two, three, four, five or six regions/positions. The variants have increased thermostability at acidic pH and/or at low Ca.sup.2+ concentrations (relative to the parent). The invention also relates to a DNA construct comprising a DNA sequence encoding an .alpha.-amylase variant of the invention, a recombinant expression vector which carries a DNA construct of the invention, a cell which is transformed with a DNA construct of the invention, the use of an .alpha.-amylase variant of the invention for washing and/or dishwashing, textile desizing, starch liquefaction, a detergent additive comprising an .alpha.-amylase variant of the invention, a manual or automatic dishwashing detergent composition comprising an .alpha.-amylase variant of the invention, a method for generating a variant of a parent Termamyl-like .alpha.-amylase, which variant exhibits increased thermostability at acidic pH and/or at low Ca.sup.2+ concentrations (relative to the parent).

12 Claims, 9 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 9

Full Title Citation Front Review Classification Date Reference Sequences Attachments

Draw Desc Image

KWIC

16. Document ID: US 6524827 B2

L2: Entry 16 of 80

File: USPT

Feb 25, 2003

US-PAT-NO: 6524827

DOCUMENT-IDENTIFIER: US 6524827 B2

TITLE: 2,6-.beta.-D-fructan hydrolase enzyme and processes for using the enzyme

DATE-ISSUED: February 25, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moller; Soren	Holte			DK
Johansen; Charlotte	Holte			DK
Schafer; Thomas	Farum			DK
Ostergaard; Peter Rahbek	Virum			DK
Hoeck; Lisbeth Hedegaard	Skodsborg			DK

US-CL-CURRENT: 435/74; 435/183, 435/252.3, 435/252.33, 435/320.1, 536/23.2

ABSTRACT:

The present invention relates to isolated polypeptides having polypeptide having 2,6-.beta.-D-fructan hydrolase activity and isolated nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

16 Claims, 8 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC

17. Document ID: US 6521434 B2

L2: Entry 17 of 80

File: USPT

Feb 18, 2003

US-PAT-NO: 6521434

DOCUMENT-IDENTIFIER: US 6521434 B2

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

DATE-ISSUED: February 18, 2003

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Danielsen; Steffen Copenhagen DK Schneider; Palle Ballerup DK

US-CL-CURRENT: 435/192; 435/252.3, 435/320.1, 435/911, 530/350, 536/23.2

ABSTRACT:

The present invention relates to isolated nucleic acid sequences encoding polypeptides having haloperoxidase activity. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences.

17 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full Title Citation Front Review Classification Date Reference Sequences Attachments
Draw, Desc Image

KWIC

18. Document ID: US 6511835 B1

L2: Entry 18 of 80

File: USPT

Jan 28, 2003

US-PAT-NO: 6511835

DOCUMENT-IDENTIFIER: US 6511835 B1

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

DATE-ISSUED: January 28, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Danielsen; Steffen Copenhagen DK Schneider; Palle Lynge DK

US-CL-CURRENT: 435/192; 435/252.3, 435/320.1, 435/911, 530/350, 536/23.2

ABSTRACT:

The present invention relates to isolated nucleic acid sequences encoding polypeptides having haloperoxidase activity. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences.

17 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full Title Citation Front Review Classification Date Reference Sequences Attachments KMC
Drawl Desc Image

19. Document ID: US 6509181 B1

L2: Entry 19 of 80

File: USPT

Jan 21, 2003

US-PAT-NO: 6509181

DOCUMENT-IDENTIFIER: US 6509181 B1

TITLE: Polypeptides having haloperoxide activity

DATE-ISSUED: January 21, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Danielsen; Steffen Copenhagen DK Schneider; Palle Lynge DK

US-CL-CURRENT: 435/192; 435/252.3, 435/320.1, 435/911, 530/350, 536/23.2

ABSTRACT:

The present invention relates to isolated polypeptides having haloperoxidase activity. The invention also relates to methods for producing and using the polypeptides.

11 Claims, 0 Drawing figures Exemplary Claim Number: 1

20. Document ID: US 6506586 B2

L2: Entry 20 of 80

File: USPT

Jan 14, 2003

US-PAT-NO: 6506586

DOCUMENT-IDENTIFIER: US 6506586 B2

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

DATE-ISSUED: January 14, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Schneider; Palle Lynge DK
Danielsen; Steffen Copenhagen DK

US-CL-CURRENT: 435/192; 435/252.3, 435/320.1, 435/911, 530/350, 536/23.2

ABSTRACT:

The present invention relates to isolated nucleic acid sequences encoding polypeptides having haloperoxidase activity. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences.

17 Claims, 0 Drawing figures Exemplary Claim Number: 1

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Search Results - Record(s) 21 through 40 of 80 returned.

21. Document ID: US 6506585 B2

L2: Entry 21 of 80

File: USPT

Jan 14, 2003

US-PAT-NO: 6506585

DOCUMENT-IDENTIFIER: US 6506585 B2

TITLE: Polypeptides having haloperoxidase activity

DATE-ISSUED: January 14, 2003

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Danielsen; Steffen Schneider; Palle Copenhagen Ballerup DK DK

US-CL-CURRENT: $\underline{435}/\underline{192}$; $\underline{435}/\underline{252.3}$, $\underline{435}/\underline{320.1}$, $\underline{435}/\underline{911}$, $\underline{530}/\underline{350}$, $\underline{536}/\underline{23.2}$

ABSTRACT:

30 The present invention relates to isolated polypeptides having haloperoxidase activity. The invention also relates to methods for producing and using the polypeptides

11 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWAC

22. Document ID: US 6503508 B2

L2: Entry 22 of 80

File: USPT

Jan 7, 2003

US-PAT-NO: 6503508

DOCUMENT-IDENTIFIER: US 6503508 B2

TITLE: Polypeptides having haloperoxidase activity

DATE-ISSUED: January 7, 2003

INVENTOR - INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Schneider; Palle

Lynge

DK

Danielsen; Steffen

Copenhagen

DK

US-CL-CURRENT: $\frac{424}{94.4}$; $\frac{422}{28}$, $\frac{435}{168}$, $\frac{435}{192}$, $\frac{435}{25}$, $\frac{435}{25}$, $\frac{435}{25.3}$, $\frac{435}{320.1}$, $\frac{435}{69.1}$, $\frac{510}{226}$, $\frac{530}{350}$, $\frac{536}{23.2}$

ABSTRACT:

The present invention relates to isolated polypeptides having haloperoxidase activity. The invention also relates to methods for producing and using the polypeptides.

12 Claims, 0 Drawing figures Exemplary Claim Number: 1



23. Document ID: US 6500658 B1

L2: Entry 23 of 80

File: USPT

Dec 31, 2002

US-PAT-NO: 6500658

DOCUMENT-IDENTIFIER: US 6500658 B1

TITLE: Xyloglucanase from Malbranchea

DATE-ISSUED: December 31, 2002

INVENTOR-INFORMATION:

NAME ·	CITY	STATE	ZIP CODE	COUNTRY
Wu; Wenping	Beijing			CN
Schulein; Martin	Copenhagen O			DK
Kauppinen; Markus Sakari	Smorum			DK
Stringer; Mary Ann	Copenhagen O			DK

ABSTRACT:

×-----

An isolated or purified polypeptide having xyloglucanase activity which is obtained from a strain of the genus Malbranchea and has xyloglucanase activity in the pH range 4-11, measured at 50.degree. C.; and/or a molecular mass of 25.+-.10 kDa, as determined by SDS-PAGE; and/or an isoelectric point (pI) in the range 3-5; and/or an N-terminal sequence Ala-Asp-Phe-Cys-Gly-Gln-Xaa-Asp-Ser-Glu-Gln-Ser-Gly-Pro-Tyr-Ile-Val-Tyr-As n-Asn-Leu is useful in industrial applications such as in laundry detergent compositions and for treatment of textiles.

16 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4

			uences Attachments	KWIC
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Drawd Desc Im	age			

24. Document ID: US 6500644 B1

L2: Entry 24 of 80 File: USPT Dec 31, 2002

US-PAT-NO: 6500644

DOCUMENT-IDENTIFIER: US 6500644 B1

TITLE: Method for in vivo production of a mutant library in cells

DATE-ISSUED: December 31, 2002

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY
Borchert; Torben Vedel Jyllinge DK
Ehrlich; Stanislas Dusko Paris FR

 $\begin{array}{l} \text{US-CL-CURRENT: } & \underline{435/69.1}; & \underline{435/189}, & \underline{435/193}, & \underline{435/195}, & \underline{435/252.33}, & \underline{435/252.5}, & \underline{435/254.3}, \\ & \underline{435/254.6}, & \underline{435/254.7}, & \underline{435/320.1}, & \underline{435/325}, & \underline{435/348}, & \underline{435/455}, & \underline{435/471}, & \underline{435/476}, & \underline{435/483}, \\ & \underline{435/484}, & \underline{435/485}, & \underline{435/485}, & \underline{435/487}, & \underline{435/488}, & \underline{435/489}, & \underline{435/91.4} \end{array} \right) ,$

ABSTRACT:

A method for in vivo production of a library in cells comprising a multitude of mutated genetic elements, wherein an error-prone polymerase is used in each ancestral cell to replicate all or a part of a genetic element independently of the host chromosomal replication machinery. The genetic element comprises i) an origin of replication from which replication is initiated, ii) optionally a genetic marker, e.g. a gene conferring resistance towards an antibiotic, iii) a gene encoding the polypeptide of interest. Also methods for the generation of a DNA sequence encoding a desired variant of a polypeptide of interest, and for the determination of such a DNA sequence are described.

19 Claims, 0 Drawing figures Exemplary Claim Number: 1

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Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWC

25. Document ID: US 6495357 B1

L2: Entry 25 of 80

File: USPT

Dec 17, 2002

US-PAT-NO: 6495357

DOCUMENT-IDENTIFIER: US 6495357 B1

TITLE: Lipolytic enzymes

DATE-ISSUED: December 17, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fuglsang; Claus Crone	Nivaa			DK
Okkels; Jens Sigurd	Frederiksberg			DK
Petersen; Dorte Aaby	Birkerod			DK
Patkar; Shamkant Anant	Lyngby			DK
Thellersen; Marianne	Frederiksberg			DK
Svendsen; Allan	Birkeroed			DK
Borch; Kim	Copenhagen			DK
Royer; John C.	Davis	CA		
Kretzschmar; Titus	Vaerloese			DK
Halkier; Torben	Birkeroed			DK
Vind; Jesper	Lyngby			DK
Jorgensen; Steen Troels	Alleroed			DK

US-CL-CURRENT: 435/198; 435/195, 435/196, 435/197

ABSTRACT:

The present invention relates to a modified enzyme with lipolytic activity, a lipolytic enzime capable of removing a substantial amount of fatty matter a one cycle wash, a DNA sequence encoding said enzymes, a vector comprising said DNA sequence, a host cell harbouring said DNA sequence or said vector, and a process for producing said enzymes with lipolytic activity.

63 Claims, 22 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 22

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments |
Draw, Desc | Image |

KWIC

26. Document ID: US 6416756 B1

L2: Entry 26 of 80

File: USPT

Jul 9, 2002

US-PAT-NO: 6416756

DOCUMENT-IDENTIFIER: US 6416756 B1

TITLE: Modified protease having 5 to 13 covalently coupled polymeric molecules for skin

care

DATE-ISSUED: July 9, 2002

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Olsen; Arne Agerlin Virum DK
Prento; Annette Kdbakken DK

US-CL-CURRENT: $\frac{424}{94.63}$; $\frac{424}{401}$, $\frac{424}{94.1}$, $\frac{424}{94.4}$, $\frac{424}{94.6}$, $\frac{424}{94.6}$, $\frac{424}{94.64}$, $\frac{424}{94.65}$, $\frac{424}{94.66}$, $\frac{424}{94.67}$, $\frac{435}{180}$, $\frac{435}{180}$, $\frac{435}{180}$

ABSTRACT:

Modified enzymes are prepared for use in skin care products by covalently coupling to the enzymes from 4 to 70 polymeric molecules with or without a linker such as a triazine ring. Molecular weight of the polymeric molecules may be from 1 to 35 kDa and of the enzymes from 15 to 100 kDa. The number and weight of polymeric molecules coupled is balanced with the weight and/or surface area of the enzymes. Enzymes include proteases such as subtilisins, lipases and oxidoreductases such as laccases and superoxide dismutase, and polymeric molecules include polysaccharides such as dextran or pullulan and polyalkylene oxides such as polyethylene glycol. The polymeric molecules may be coupled to the enzymes at the N-terminal amino group and/or lysine residues, and preferably at a position more than 5 .ANG. from the active site of the enzymes. A preferred modified enzyme is a protease having from 5 to 13 coupled polymeric molecules. Skin care products containing the modified enzymes have improved stability and reduced allergenicity as compared to the products containing the unmodified enzymes.

17 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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Keac

27. Document ID: US 6410305 B1

L2: Entry 27 of 80

File: USPT

Jun 25, 2002

US-PAT-NO: 6410305

DOCUMENT-IDENTIFIER: US 6410305 B1

** See image for Certificate of Correction **

TITLE: Treatment of animal waste

DATE-ISSUED: June 25, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Miller; Guy W.

Minneapolis

MN

Patterson; Gregory Scott

Hopkins

MN

US-CL-CURRENT: 435/268; 210/611, 210/613, 424/76.5, 424/76.6, 426/2, 435/836, 435/838, 435/839, 435/842, 435/856

ABSTRACT:

A process and composition for treating an animal waste in a waste holding facility to reduce sulfides and enhance efficient degradation of large amounts of organic matter with reduced odor. The process includes administering a probiotic material capable of promoting organic digestion to an animal and maintaining a sulfide gas concentration of less than 10 ppm from a waste produced by the animal. Maintaining a low sulfide gas concentration can be done by adding an innoculum of sulfide-utilizing bacteria to the waste produced by the animal.

56 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title Citatio	n Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw, D	esc Image							

KWIC

28. Document ID: US 6410292 B1

L2: Entry 28 of 80

File: USPT

Jun 25, 2002

US-PAT-NO: 6410292

DOCUMENT-IDENTIFIER: US 6410292 B1

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

DATE-ISSUED: June 25, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Danielsen; Steffen Schneider; Palle Copenhagen Ballerup DK DK

US-CL-CURRENT: 435/192; 435/252.3, 435/320.1, 510/226, 530/300, 530/350, 536/23.2

ABSTRACT:

The present invention relates to isolated nucleic acid sequences encoding polypeptides having haloperoxidase activity. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences.

10 Claims, 0 Drawing figures Exemplary Claim Number: 1

> Full Title Citation Front Review Classification Date Reference Sequences Attachments Draw, Desc | Image

29. Document ID: US 6410291 B1

L2: Entry 29 of 80

File: USPT

Jun 25, 2002

US-PAT-NO: 6410291

DOCUMENT-IDENTIFIER: US 6410291 B1

TITLE: Polypeptides having haloperoxidase activity

DATE-ISSUED: June 25, 2002

INVENTOR - INFORMATION:

CITY STATE ZIP CODE COUNTRY

DK Danielsen; Steffen Copenhagen DK Schneider; Palle Ballerup

US-CL-CURRENT: 435/192; 435/252.3, 435/320.1, 510/226, 530/300, 530/350, 536/23.2

ABSTRACT:

The present invention relates to isolated polypeptides having haloperoxidase activity. The invention also relates to methods for producing and using the polypeptides.

11 Claims, 0 Drawing figures Exemplary Claim Number: 1

> Full Title Citation Front Review Classification Date Reference Sequences Attachments Draw, Desc Image

30. Document ID: US 6399561 B1

L2: Entry 30 of 80

File: USPT

Jun 4, 2002

US-PAT-NO: 6399561

DOCUMENT-IDENTIFIER: US 6399561 B1

TITLE: Methods and compositions for bleaching a dye in solution

DATE-ISSUED: June 4, 2002

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Schneider; Palle Ballerup DK Deussen; Heinz-Josef Soborg DK

US-CL-CURRENT: 510/392; 510/226, 510/276, 510/312, 510/320, 510/321, 510/374, 510/375,

510/393, 510/530, 8/101, 8/111, 8/401

ABSTRACT:

The present invention provides methods and compositions for bleaching a dye in solution comprising contacting, in an aqueous solution, the dye with a composition comprising a laccase and an enhancing agent of the formula: ##STR1##

in which A is: ##STR2##

and B is H, or C1-C4 unbranched alkyl wherein said alkyl may contain ether groups, and one, two, three, four of R2, R3, R4, R5 and R6 are H, NH2, COOH, SO3H, CN, CH3, COCH3, NO2, OCH3, NR7R8, COOR9, or NOH--CO--R10, wherein R7, R8, R9 and R10 are C1-C2 unbranched alkyl, and one, two, three, four or five of R2, R3, R4, R5 and R6 is NH2, COOH, SO3H, CN, CH3, COCH3, NO2, OCH3, NR7R8, COOR9, or NOH--CO--R10, wherein R7, R8, R9 and R10 are C1-C2 unbranched alkyl.

11 Claims, 0 Drawing figures Exemplary Claim Number: 1

31. Document ID: US 6361989 B1

L2: Entry 31 of 80

File: USPT

Mar 26, 2002

US-PAT-NO: 6361989

DOCUMENT-IDENTIFIER: US 6361989 B1

TITLE: .alpha.-amylase and .alpha.-amylase variants

DATE-ISSUED: March 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Svendsen; Allan	Birkerod			DK
Borchert; Torben Vedel	Copenhagen			DK
Bisgard-Frantzen; Henrik	Bagsvaerd			DK
Outtrup; Helle	Ballerup			DK
Nielsen; Bjarne Ronfeldt	Virum			DK
Nielsen; Vibeke Skovgaard	Bagsv.ae butted.rd			DK
Hedegaard; Lisbeth	Skodsborg			DK

US-CL-CURRENT: <u>435/202</u>; <u>435/183</u>, <u>435/200</u>

ABSTRACT:

The invention relates to a novel Termamyl-like .alpha.-amylase, and Termamyl-like .alpha.-amylases comprising mutations in two, three, four, five or six regions/positions. The variants have increased thermostability at acidic pH and/or at low Ca.sup.2+ concentrations (relative to the parent). The invention also relates to a DNA construct comprising a DNA sequence encoding an .alpha.-amylase variant of the invention, a recombinant expression vector which carries a DNA construct of the invention, a cell which is transformed with a DNA construct of the invention, the use of an .alpha.-amylase variant of the invention for washing and/or dishwashing, textile desizing, starch liquefaction, a detergent additive comprising an .alpha.-amylase variant of the invention, a manual or automatic dishwashing detergent composition comprising an .alpha.-amylase variant of the invention, a method for generating a variant of a parent Termamyl-like .alpha.-amylase, which variant exhibits increased thermostability at acidic pH and/or at low Ca.sup.2+ concentrations (relative to the parent).

5 Claims, 9 Drawing figures

Exemplary Claim Number: 1
Number of Drawing Sheets: 9

Full Title Citation Front Review Classification Date Reference Sequences Attachments KWC |

32. Document ID: US 6350604 B1

L2: Entry 32 of 80

File: USPT

Feb 26, 2002

US-PAT-NO: 6350604

DOCUMENT-IDENTIFIER: US 6350604 B1

TITLE: Alkaline lipolytic enzyme

DATE-ISSUED: February 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE ZIF	CODE	COUNTRY
Hirayama; Satoshi	Chiba			JP
Taira; Rikako	Chiba			JP
Borch; Kim	K.o slashed.benhavn K			DK
Sandal; Thomas	Herlev			DK
Halkier; Torben	Birker.o slashed.d			DK
Oxenb.o slashed.ll; Karen Margrethe	Charlottenlund			DK
Nielsen; Bjarne R.o slashed.nfeldt	Virum			DK

US-CL-CURRENT: $\underline{435}/\underline{198}$; $\underline{435}/\underline{195}$, $\underline{435}/\underline{252.3}$, $\underline{435}/\underline{320.1}$, $\underline{510}/\underline{226}$, $\underline{530}/\underline{350}$, $\underline{536}/\underline{23.2}$, $\underline{536}/\underline{23.74}$

ABSTRACT:

Lipolytic enzymes with high activity at alkaline pH in the absence of Ca.sup.++ can be obtained from filamentous fungi of the genera Gliocladium, Verticillium and Trichophaea and that the lipolytic enzymes are effective for improving the effect of detergents. The lipolytic enzymes have a good washing performance, as expressed by the hydrolysis of oil on textile swatches. The amino acid sequences of the lipolytic enzymes are highly homologous.

13 Claims, 8 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 8

Full	Title Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWAC

33. Document ID: US 6323007 B1

L2: Entry 33 of 80

File: USPT

Nov 27, 2001

US-PAT-NO: 6323007

DOCUMENT-IDENTIFIER: US 6323007 B1

TITLE: 2,6-.beta.-D-fructan hydrolase enzyme and processes for using the enzyme

DATE-ISSUED: November 27, 2001

INVENTOR-INFORMATION:

CITY STATE ZIP CODE COUNTRY NAME Holte DK Moller; Soren Johansen; Charlotte Holte DK Schafer; Thomas DK Farum DK Ostergaard; Peter Rahbek Virum Hoeck; Lisbeth Hedegaard Skodsborg DK

US-CL-CURRENT: 435/74; 435/200, 435/252.33, 435/262, 435/274, 435/320.1

ABSTRACT:

The present invention relates to isolated polypeptides having polypeptide having 2,6-.beta.-D-fructan hydrolase activity and isolated nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

10 Claims, 8 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 8

KOMO

34. Document ID: US 6309871 B1

L2: Entry 34 of 80

File: USPT

Oct 30, 2001

US-PAT-NO: 6309871

DOCUMENT-IDENTIFIER: US 6309871 B1

TITLE: Polypeptides having alkaline .alpha.-amylase activity

DATE-ISSUED: October 30, 2001

INVENTOR-INFORMATION:

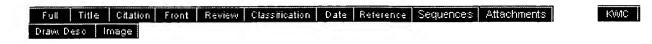
NAME CITY STATE ZIP CODE COUNTRY Outtrup; Helle DK Vaerlose Borchert; Torben Vedel Copenhagen DK Nielsen; Bjarne Ronfeldt Virum DK Nielsen; Vibeke Skovgaard Bagsv.ae butted.rd DK Hoeck; Lisbeth Hedegaard DK Skodsborg

US-CL-CURRENT: 435/202

ABSTRACT:

The present invention relates to isolated polypeptides having .alpha.-amylase activity and isolated nucleic acid sequences encoding the polypeptides, which may be derived from Bacillus. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

6 Claims, 9 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 9



35. Document ID: US 6303752 B1

L2: Entry 35 of 80

File: USPT

Oct 16, 2001

US-PAT-NO: 6303752

DOCUMENT-IDENTIFIER: US 6303752 B1

TITLE: Polypeptides conjugated with polymers

DATE-ISSUED: October 16, 2001

INVENTOR-INFORMATION:

CITY STATE ZIP CODE COUNTRY NAME Olsen; Arne Agerlin Virum DK Fatum; Tine Muxoll Aller.o slashed.d DK Deussen; Heinz Josef S.o slashed.borg DK DK Roggen; Erwin Ludo Lyngby

US-CL-CURRENT: 530/350; 435/189, 435/193, 435/221, 435/222, 530/402, 530/403

ABSTRACT:

The present invention relates to modified polypeptides with reduced respiratory allergenicity having polymeric molecules with a molecular weight from 100 up to 750 Da, coupled covalently to the parent polypeptide having a molecular weight from 5 to 100 kDa. The present invention also relates to industrial compositions comprising modified polypeptide with reduced respiratory allergenicity, skin care products, the use of modified polypeptides for reducing the allergenicity of industrial composition and products and finally a method for reducing the allergenicity of polypeptides.

32 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full Title Citation Front Review Classification Date Reference Sequences Attachmen									
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KWAC

36. Document ID: US 6300116 B1

L2: Entry 36 of 80

File: USPT

Oct 9, 2001

US-PAT-NO: 6300116

DOCUMENT-IDENTIFIER: US 6300116 B1

TITLE: Modified protease having improved autoproteolytic stability

DATE-ISSUED: October 9, 2001

INVENTOR - INFORMATION:

NAME	CITY	STATE	ZIP	CODE	COUNTRY
von der Osten; Claus	Lyngby				DK
Halkier; Torben	Birkerod				DK
Andersen; Carsten	Vaerloese				DK
Bauditz; Peter	Copenhagen O				DK
Hansen; Peter Kamp	Lejre				DK

ABSTRACT:

The present invention relates to enzymes produced by mutating the genes for a number of subtilases and expressing the mutated genes in suitable hosts are presented. The enzymes exhibit improved autoproteolytic stability in comparison to their wild type parent enzymes.

33 Claims, 0 Drawing figures Exemplary Claim Number: 1



37. Document ID: US 6287585 B1

L2: Entry 37 of 80

File: USPT

Sep 11, 2001

US-PAT-NO: 6287585

DOCUMENT-IDENTIFIER: US 6287585 B1

TITLE: Methods for laundry using polycations and enzymes

DATE-ISSUED: September 11, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Johansen; Charlotte Holte DK

US-CL-CURRENT: 424/405; 510/276, 510/300, 510/360, 510/530

ABSTRACT:

The present invention provides a method of killing or inhibiting the growth of microbial cells present on laundry, comprising contacting the cells with a composition comprising a poly-cationic compound, preferably a polyamino acid, a polyvinylamine, a copolymer prepared from vinylamine and one or more carboxylic acid anhydrides, e.g. a polymer comprising 0.1-100 mol % vinyl amine or ethyleneimine units, 0-99.9 mol % units of at least one monomer selected from N-vinylcarboxamides of the formula I ##STR1##

wherein R.sup.1 and R.sup.2 are hydrogen or C.sub.1 -C.sub.6 -alkyl;

vinyl formate, vinyl acetate, vinyl propionate, vinyl alcohol, C.sub.1 -C.sub.6 -alkyl vinyl ether, mono ethylenic unsaturated C.sub.3 -C.sub.8 -carboxylic acid, and esters, nitrites, amides and anhydrides thereof, N-vinylurea, N-imidazoles and N-vinyl imidazolines; and

0-5 mol % units of monomers having at least two unsaturated ethylenic double bonds;

and one or more enzymes, preferably glycanases, muranases, oxidoreductases, glucanases, proteases, amylases, lipases, pectinases and xylanases.

Jul 31, 2001

8 Claims, 2 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 2

Full Title Citation Front Review Classification Date Reference Sequences Attachments KMC

38. Document ID: US 6268197 B1

L2: Entry 38 of 80 File: USPT

US-PAT-NO: 6268197

DOCUMENT-IDENTIFIER: US 6268197 B1

TITLE: Xyloglucan-specific alkaline xyloglucanase from bacillus

DATE-ISSUED: July 31, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Schulein; Martin Copenhagen DK DK Outtrup; Helle Ballerup Jorgensen; Per Lina Copenhagen DK Frederiksberg DK Bjornvad; Mads Eskelund

US-CL-CURRENT: 435/209; 435/263, 510/320, 510/392, 510/530

ABSTRACT:

A xyloglucanase having a relative xyloglucanase activity of at least 50% at pH 7 and either no or an insignificant cellulolytic activity is obtainable e.g. from a strain of Bacillus. A xyloglucanase comprising an amino acid sequence as shown in positions 30-261 of SEQ ID NO:2 or homologues may be derived from eg Bacillus licheniformis, ATCC 14580, and may be encoded by polynucleotide molecules comprising a nucleotide sequence as shown in SEQ ID NO:1 from nucleotide 88 to nucleotide 783; and a xyloglucanase comprising an amino acid sequence as shown in positions 1-537 of SEQ ID NO:4 or homologues may be derived from eg B. agaradhaerens, NCIMB 40482, and may be encoded by polynucleotide molecules comprising a nucleotide sequence as shown in SEQ ID NO:3 from nucleotide 1 to nucleotide 1611. The xyloglucanases are useful e.g. in cleaning compositions and for treatment of cellulosic fibres.

12 Claims, 0 Drawing figures Exemplary Claim Number: 1

	itle Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	K0MC:
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File: USPT

US-PAT-NO: 6258590

L2: Entry 39 of 80

DOCUMENT-IDENTIFIER: US 6258590 B1

TITLE: Biopreparation of textiles at high temperatures

Jul 10, 2001

DATE-ISSUED: July 10, 2001

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Lange; Niels Erik Krebs Raleigh

Kongsbak; Lars Holte DK
Shulein; Martin Copenhagen .O slashed. DK
Bj.o slashed.rnvad; Mads Eskelund Frederiksberg DK

Husain; Philip Anwar Wake Forest NC

US-CL-CURRENT: 435/263; 435/232, 8/137, 8/139

ABSTRACT:

The present invention provides methods for higha-temperature biopreparation of cellulosic fibers by contacting the fibers with pectin-degrading enzymes, preferably thermostable, alkaline, divalent cation-independent pectate lyases, under conditions compatible with scouring and bleaching technologies.

7 Claims, 2 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 2



KWIC

40. Document ID: US 6255451 B1

L2: Entry 40 of 80 File: USPT Jul 3, 2001

US-PAT-NO: 6255451

DOCUMENT-IDENTIFIER: US 6255451 B1

TITLE: Degradation of biologically degradable polymers using enzymes

DATE-ISSUED: July 3, 2001

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY
Koch; Rainhard Koln DE

Lund; Henrik Kopenhagen DK

US-CL-CURRENT: $\underline{528}/\underline{490}$; $\underline{435}/\underline{18}$, $\underline{435}/\underline{19}$, $\underline{435}/\underline{252.1}$, $\underline{435}/\underline{254.1}$, $\underline{435}/\underline{255.1}$, $\underline{435}/\underline{262}$, $\underline{435}/\underline{29}$

ABSTRACT:

This invention relates to the complete degradation by enzymes of moldings, sheet-like products, coatings, adhesives or foams made of biodegradable polymers. The invention relates in particular to the enzymatic degradation of polyester amides, and of polyester urethanes which contain urea groups.

7 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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Search Results - Record(s) 41 through 60 of 80 returned.

41. Document ID: US 6245901 B1

L2: Entry 41 of 80 File: USPT Jun 12, 2001

US-PAT-NO: 6245901

DOCUMENT-IDENTIFIER: US 6245901 B1

TITLE: Modified polypeptide

DATE-ISSUED: June 12, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY von der Osten; Claus Lyngby DK
Olsen; Arne Agerlin Virum DK
Roggen; Erwin Ludo Lyngby DK

 $\text{US-CL-CURRENT: } \underline{530/402}; \ \underline{435/192}, \ \underline{435/221}, \ \underline{435/252.3}, \ \underline{435/320.1}, \ \underline{435/471}, \ \underline{435/69.1}, \\ \underline{69.1}, \ \underline{69.1}$

<u>536/23.2</u>

ABSTRACT:

The present invention relates to polypeptide-polymer conjugates having added and/or removed one or more attachment groups for coupling polymeric molecules on the surface of the polypeptide structure, a method for preparing polypeptide-polymer conjugates of the invention, the use of said conjugated for reducing the immunogenicity and allergenicity and compositions comprising said conjugate.

23 Claims, 1 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 1

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42. Document ID: US 6242405 B1

L2: Entry 42 of 80 File: USPT Jun 5, 2001

US-PAT-NO: 6242405

DOCUMENT-IDENTIFIER: US 6242405 B1

TITLE: Enzyme-containing particles and liquid detergent concentrate

DATE-ISSUED: June 5, 2001

INVENTOR - INFORMATION:

STATE ZIP CODE COUNTRY CITY NAME DK Bronshoj Lykke; Mads West Yorkshire GB Mistry; Kishor Kumar Soborg DK Simonsen; Ole GB West Yorkshire Symes; Kenneth Charles

US-CL-CURRENT: 510/321; 435/177, 435/188, 510/320, 523/201

ABSTRACT:

A liquid detergent concentrate has an outer liquid detergent phase and enzyme containing particles dispersed in the liquid phase. The particles have a polymer shell formed from a condensation polymer which is permeable to water and low molecular weight components of the outer liquid phase and the core comprises the enzyme, an inner liquid detergent phase in substantially equilibrium with the outer phase and a core polymer which causes stretching as a result of osmosis when the concentrate is diluted in water. Encapsulated precipitated enzymes are also disclosed.

17 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full Title	Citation Fior	nt Meview Classific.	ation Date Reference	e Sequences Attachments	KWC
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aww Desc	image i				

43. Document ID: US 6228128 B1

L2: Entry 43 of 80 File: USPT May 8, 2001

US-PAT-NO: 6228128

DOCUMENT-IDENTIFIER: US 6228128 B1

TITLE: Antimicrobial activity of laccases

DATE-ISSUED: May 8, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY
Johansen; Charlotte DK-2840 Holte DK
Pedersen; Anders Hjelholt DK-2800 Lyngby DK
Fuglsang; Claus Crone 2990 Nivaa DK

US-CL-CURRENT: 8/137; 134/42, 422/28, 424/78.03, 424/78.07, 510/114, 510/131, 510/137, 510/161, 510/226, 510/320, 510/321, 510/392, 510/392, 510/530

ABSTRACT:

A method for antimicrobial treatment of microorganisms and/or viruses which involves treating the microorganisms and/or viruses with an effective amount of a fungal laccase and one or more enhancers in the presence of oxygen, the enhancers having the formula: ##STR1##

wherein A, B and C are as defined in the specification.

20 Claims, 5 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 5



44. Document ID: US 6207436 B1

L2: Entry 44 of 80

File: USPT

Mar 27, 2001

US-PAT-NO: 6207436

DOCUMENT-IDENTIFIER: US 6207436 B1

TITLE: Endo-B-1,4-glucanases from saccharothrix

DATE-ISSUED: March 27, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Bj.o slashed.rnvad; Mads Eskelund Frederiksberg DK

Hatakeyama; Mariko Fairfield CA

Schulein; Martin Copenhagen DK Nielsen; Jack Bech Hellerup DK

US-CL-CURRENT: 435/209; 435/183, 435/195, 435/200, 536/23.2

ABSTRACT:

An enzyme preparation comprising an enzyme having endo-.beta.-1,4-glucanase activity obtainable from or endogeneous to a strain belonging to the genus Saccharothrix such as Saccharothrix australiensis, IFO 14444; an isolated polynucleotide (DNA) molecule encoding an enzyme or enzyme core (the catalytically active domain of the enzyme) exhibiting endo-.beta.-1,4-glucanase activity selected from (a) polynucleotide molecules comprising a nucleotide sequence as shown in SEQ ID NO:1 from nucleotide 676 to nucleotide 1470, (b) polynucleotide molecules that encode a polypeptide that is at least 80% identical to the amino acid sequence of SEQ ID NO:2 from amino acid residue 226 to amino acid residue 490, and (c) degenerate nucleotide sequences of (a) or (b), the expressed endoglucanase and the enzyme preparation being useful in a detergent or fabric softener composition or in the textile industry for improving the properties of cellulosic fibres or fabric or for providing a stone-washed look of denim.

6 Claims, 0 Drawing figures Exemplary Claim Number: 1



45. Document ID: US 6201110 B1

L2: Entry 45 of 80

File: USPT

Mar 13, 2001

US-PAT-NO: 6201110

DOCUMENT-IDENTIFIER: US 6201110 B1

TITLE: Polypeptide with reduced respiratory allergenicity

DATE-ISSUED: March 13, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Olsen; Arne Agerlin Virum DK
Hansen; Lars Bo Herlev DK
Beck; Thomas Christian Birker.o slashed.d DK

US-CL-CURRENT: 530/402; 435/189, 435/190, 530/350, 530/403

ABSTRACT:

The invention relates to modified polypeptides with reduced respiratory allergenicity comprising a parent polypeptide with a molecular weight from between 10 kDa and 100 kDa conjugated to a polymer with a molecular weight (M.sub.r) in the range of 1 kDa and 60 kDa. The modified polypeptide are produced using a process including the step of conjugating from 1 to 30 polymer molecules with the parent polypeptide. Further the invention relates to compositions comprising said polypeptides and further ingredients normally used in e.g. detergents, including dishwashing detergents and soap bars, household article, agrochemicals, personal care products, cosmetics, toiletries, oral and dermal pharmaceuticals, composition for treating textiles, and compositions used for manufacturing food and feed. Finally the invention is directed to uses of polypeptides with reduced allergenicity or compositions thereof for reducing the allergenicity of products for a vast number of industrial applications.

14 Claims, 5 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Drawi D	esc	mage							•	

46. Document ID: US 6184010 B1

L2: Entry 46 of 80

File: USPT

Feb 6, 2001

US-PAT-NO: 6184010

DOCUMENT-IDENTIFIER: US 6184010 B1

TITLE: Enzymatic hydrolysis of cyclic oligomers

DATE-ISSUED: February 6, 2001

INVENTOR-INFORMATION:

CITY NAME STATE ZIP CODE COUNTRY Riegels; Martin Leichlingen DE Koch; Rainhard Koln DE Pedersen; Lars Saaby Farum DK Lund; Henrik Raleigh NC

US-CL-CURRENT: 435/135; 435/134, 435/136, 435/145, 435/196

ABSTRACT:

The present invention relates to a process for enzymatic hydrolysis of cyclic oligomers of poly(ethylene terephthalate), which process comprises subjecting the cyclic oligomer to the action of one or more lipolytic and/or biopolyester hydrolytic enzyme(s).

9 Claims, 0 Drawing figures Exemplary Claim Number: 1 Full Title Citation Front Review Classification Date Reference Sequences Attachments

Draw, Desc Image

KWC

47. Document ID: US 6177012 B1

L2: Entry 47 of 80

File: USPT

Jan 23, 2001

US-PAT-NO: 6177012

DOCUMENT-IDENTIFIER: US 6177012 B1

** See image for Certificate of Correction **

TITLE: Enzyme-producing strain of bacillus bacteria

DATE-ISSUED: January 23, 2001

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Lawler; David Smith; Steven Cheshire Cheshire CT CT

 $\begin{array}{l} \text{US-CL-CURRENT: } \underline{210/606}; \ \underline{210/600}, \ \underline{210/611}, \ \underline{424/93.46}, \ \underline{426/442}, \ \underline{426/61}, \ \underline{426/807}, \\ \underline{435/252.4}, \ \underline{435/252.5}, \ \underline{435/264}, \ \underline{435/267}, \ \underline{435/821}, \ \underline{435/832} \end{array}$

ABSTRACT:

This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

10 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments |
Draw, Desc | Image |

KWIC

48. Document ID: US 6174718 B1

L2: Entry 48 of 80

File: USPT

Jan 16, 2001

US-PAT-NO: 6174718

DOCUMENT-IDENTIFIER: US 6174718 B1

TITLE: Enzyme-producing strain of Bacillus bacteria

DATE-ISSUED: January 16, 2001

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Lawler; David

Cheshire

CT

Smith; Steven Cheshire

CT

US-CL-CURRENT: $\frac{435}{252.5}$; $\frac{210}{600}$, $\frac{210}{601}$, $\frac{210}{610}$, $\frac{426}{53}$, $\frac{435}{252.4}$, $\frac{435}{262.5}$, $\frac{435}{822}$, $\frac{435}{832}$

ABSTRACT:

This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, and protease enzymes to degrade proteins. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

10 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4



49. Document ID: US 6171848 B1

L2: Entry 49 of 80

File: USPT

Jan 9, 2001

US-PAT-NO: 6171848

DOCUMENT-IDENTIFIER: US 6171848 B1

** See image for Certificate of Correction **

TITLE: Enzyme-producing strain of Bacillus bacteria

DATE-ISSUED: January 9, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Lawler; David Cheshire CT Smith; Steven Cheshire CT

US-CL-CURRENT: $\frac{435}{252.5}$; $\frac{210}{600}$, $\frac{210}{601}$, $\frac{424}{93.46}$, $\frac{426}{2}$, $\frac{426}{442}$, $\frac{426}{807}$, $\frac{435}{262.5}$, $\frac{435}{267}$, $\frac{435}{832}$

ABSTRACT:

This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

9 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
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50. Document ID: US 6171847 B1

L2: Entry 50 of 80

File: USPT

Jan 9, 2001

US-PAT-NO: 6171847

DOCUMENT-IDENTIFIER: US 6171847 B1

TITLE: Enzyme-producing strain of Bacillus bacteria

DATE-ISSUED: January 9, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Lawler; David Cheshire CT Smith; Steven Cheshire CT

US-CL-CURRENT: $\frac{435}{252.5}$; $\frac{210}{600}$, $\frac{210}{601}$, $\frac{424}{93.46}$, $\frac{426}{2}$, $\frac{426}{442}$, $\frac{426}{807}$, $\frac{435}{262.5}$, $\frac{435}{267}$, $\frac{435}{832}$

ABSTRACT:

This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

9 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4

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Full Title (Citation Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw, Desc Ima	age						

KWIC

51. Document ID: US 6165770 A

L2: Entry 51 of 80

File: USPT

Dec 26, 2000

US-PAT-NO: 6165770

DOCUMENT-IDENTIFIER: US 6165770 A

TITLE: Alkaline stable amylase from Thermoalcalibacter

DATE-ISSUED: December 26, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Sj.o slashed.holm; Carsten Aller.o slashed.d DK
Antranikian; Garabed Hamburg DE
Prowe; Steffan Hamburg DE

US-CL-CURRENT: 435/202; 510/392, 510/531

ABSTRACT:

The present invention relates to a novel alkali stable amylase obtained from Thermoalcalibacter bogoriae, an enzyme composition comprising said amylase, and the use of said enzyme and enzyme composition for a number of industrial applications.

8 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4 Full Title Citation Front Review Classification Date Reference Sequences Attachments KM
Draw Desc Image

52. Document ID: US 6162635 A

L2: Entry 52 of 80

File: USPT

Dec 19, 2000

US-PAT-NO: 6162635

DOCUMENT-IDENTIFIER: US 6162635 A

** See image for Certificate of Correction **

TITLE: Enzyme-producing strain of Bacillus bacteria

DATE-ISSUED: December 19, 2000

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Lawler; David

Cheshire

CT

Smith; Steven

Cheshire

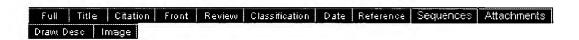
CT

US-CL-CURRENT: $\frac{435}{252.5}$; $\frac{210}{601}$, $\frac{210}{610}$, $\frac{210}{611}$, $\frac{426}{53}$, $\frac{435}{252.4}$, $\frac{435}{262.5}$, $\frac{435}{832}$,

ABSTRACT:

This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

9 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4



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53. Document ID: US 6162634 A

L2: Entry 53 of 80

File: USPT

Dec 19, 2000

US-PAT-NO: 6162634

DOCUMENT-IDENTIFIER: US 6162634 A

** See image for Certificate of Correction **

TITLE: Enzyme-producing strain of Bacillus bacteria

DATE-ISSUED: December 19, 2000

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Lawler; David

Cheshire

CT

Smith; Steven

Cheshire

CT

US-CL-CURRENT: <u>435/252.5</u>; <u>210/601</u>, <u>210/610</u>, <u>210/611</u>, <u>426/53</u>, <u>435/252.4</u>, <u>435/262.5</u>, 435/832, 435/839

ABSTRACT:

This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

9 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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54. Document ID: US 6162260 A

L2: Entry 54 of 80

File: USPT

Dec 19, 2000

US-PAT-NO: 6162260

DOCUMENT-IDENTIFIER: US 6162260 A

TITLE: Single-bath biopreparation and dyeing of textiles

DATE-ISSUED: December 19, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Liu; Jiyin Raleigh NC Condon; Brian Wake Forest NC Showmaker, III; Harry Lee Raleigh NC

US-CL-CURRENT: 8/401

ABSTRACT:

The present invention provides methods for single-bath biopreparation and dyeing of cellulosic fibers, which are carreid out by contacting the fibers simultaneously or sequentially with a pectin-degrading enzyme, preferably pectate lyase, and a dyeing system, under conditions that do not require emptying the bath or rinsing the fabric between biopreparation and dyeing steps.

22 Claims, 1 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 1

Full Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KAMC
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55. Document ID: US 6140106 A

L2: Entry 55 of 80

File: USPT

Oct 31, 2000

US-PAT-NO: 6140106

DOCUMENT-IDENTIFIER: US 6140106 A

** See image for Certificate of Correction **

TITLE: Enzyme-producing strain of Bacillus subtilis

DATE-ISSUED: October 31, 2000

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Lawler; David Cheshire CT Smith; Steven Cheshire CT

US-CL-CURRENT: $\frac{435}{252.5}$; $\frac{210}{601}$, $\frac{210}{602}$, $\frac{426}{2}$, $\frac{426}{442}$, $\frac{426}{807}$, $\frac{435}{252.4}$, $\frac{435}{262.5}$, $\frac{435}{839}$

ABSTRACT:

This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

9 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC

56. Document ID: US 6126698 A

L2: Entry 56 of 80

File: USPT

Oct 3, 2000

US-PAT-NO: 6126698

DOCUMENT-IDENTIFIER: US 6126698 A

TITLE: Continuous biopolishing of cellulose-containing fabrics

DATE-ISSUED: October 3, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Liu; Jiyin Raleigh NC Condon; Brian Wake Forest NC

US-CL-CURRENT: 8/401; 435/263, 8/116.1

ABSTRACT:

A method for continuously biopolishing cellulose-containing fabrics is disclosed. This method involves (a) contacting the fabric with a cellulase having low affinity for cellulose and (b) subjecting the contacted fabric to high temperature. Treatment of the cellulose-containing material may be carried out as an additional step or a combined step with chemical preparation, dyeing, printing and finishing. This treatment results in excellent pilling performance, minimal loss in fabric strength and weight, and better wettability.

14 Claims, 2 Drawing figures

Exemplary Claim Number: 1 Number of Drawing Sheets: 2

Full Title Citation Front Review Classification Date Reference Sequences Attachments

Craww Desc Image

KWIC

57. Document ID: US 6087148 A

L2: Entry 57 of 80

File: USPT

Jul 11, 2000

DK

US-PAT-NO: 6087148

DOCUMENT-IDENTIFIER: US 6087148 A

TITLE: Method of purification of cellulose from a broth solution by crystallization

DATE-ISSUED: July 11, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Rancke-Madsen; Anders

Charlottenlund DK

Laustsen; Mads Aage Lyngby

US-CL-CURRENT: 435/209; 117/927, 435/816

ABSTRACT:

A method for purification, and isolation in crystalline form, of a cellulase from a broth comprises: treating the broth with a crystallization-effective amount of a water-miscible organic solvent (e.g. a lower aliphatic alcohol or ketone); and isolating the cellulase in question in crystalline form.

8 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Attachments
Draw, Dr	eso li	nage						

KWIC

58. Document ID: US 6083737 A

L2: Entry 58 of 80

File: USPT

Jul 4, 2000

US-PAT-NO: 6083737

DOCUMENT-IDENTIFIER: US 6083737 A

TITLE: Enzyme-producing strain of Bacillus pumilus

DATE-ISSUED: July 4, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Lawler; David Cheshire CT Smith; Steven Cheshire CT

US-CL-CURRENT: 435/252.5; 210/601, 210/602, 426/2, 426/442, 426/807, 435/252.4,

435/262.5, 435/832

ABSTRACT:

This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, and protease enzymes to degrade proteins. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

10 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4

Full Title Citation Front Review Classification Date Reference Sequences Attachments

Draw, Desc | Image |

59. Document ID: US 6071356 A

L2: Entry 59 of 80

File: USPT

Jun 6, 2000

US-PAT-NO: 6071356

DOCUMENT-IDENTIFIER: US 6071356 A

TITLE: Cleaning-in-place with a solution containing a protease and a lipase

DATE-ISSUED: June 6, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Olsen; Hans Sejr Holte DK

US-CL-CURRENT: $\underline{134}/\underline{26}$; $\underline{134}/\underline{27}$, $\underline{134}/\underline{28}$, $\underline{134}/\underline{29}$, $\underline{510}/\underline{111}$, $\underline{510}/\underline{218}$, $\underline{510}/\underline{234}$, $\underline{510}/\underline{392}$, $\underline{510}/\underline{530}$

ABSTRACT:

The present invention relates to methods of cleaning-in-place soiled process equipment comprising circulating a solution comprising a protease and a lipase for a sufficient period of time to permit action of the enzymes.

12 Claims, 0 Drawing figures Exemplary Claim Number: 1



KWIC

60. Document ID: US 6066481 A

L2: Entry 60 of 80 File: USPT May 23, 2000

US-PAT-NO: 6066481

DOCUMENT-IDENTIFIER: US 6066481 A

TITLE: Crystallization of a protein with a sulphur salt

DATE-ISSUED: May 23, 2000

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Nielsson; Stig Lynge DK Laustsen; Mads Aage Lyngby DK

US-CL-CURRENT: 435/183; 210/702, 435/189, 435/195, 435/198, 435/202, 435/219, 435/220, 435/221, 435/816

ABSTRACT:

The present invention relates to a method for crystallization of a protein obtained from a protein-containing solution which involves (a) treating the protein-containing solution with a salt containing a sulphur atom having an oxidation state less than 6, and (b) recovering the protein in crystalline form.

13 Claims, 1 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 1

Full Title Citation Draw. Desc Image	Front Review Classification I	Date Reference	Sequences	Attachments	KWIC

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Previous Page Next Page

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Search Results - Record(s) 61 through 80 of 80 returned.

61. Document ID: US 6031082 A

L2: Entry 61 of 80

File: USPT

Feb 29, 2000

US-PAT-NO: 6031082

DOCUMENT-IDENTIFIER: US 6031082 A

TITLE: Increased yields of a crystallized protein by using a solid adsorption material

DATE-ISSUED: February 29, 2000

INVENTOR-INFORMATION:

NAME CITY

STATE ZIP CODE C

COUNTRY

Nielsson; Stig

Lynge

Di

DK

Murmann; Niels

Lyngby

DK

Simpson; Curran

Youngsville

NC

US-CL-CURRENT: 530/413; 530/415, 530/416, 530/417, 530/418

ABSTRACT:

The invention deals with a method for crystallizing in increased yields a polypeptide or a protein obtained from a protein solution comprising more than one protein, comprising:

- (a) treating the protein solution with a solid adsorption material; and
- (b) crystallizing the polypeptide or the protein after said solid adsorption material has been removed; or
- (c) crystallizing the polypeptide or the protein without removing said adsorption material.
- 17 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Camillaneae	Attachmente
		Oli-tion	1.19116	mediedo	Classification	Date	Meretelline	Degacrices	Attachments
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KWIC

62. Document ID: US 6025152 A

L2: Entry 62 of 80

File: USPT

Feb 15, 2000

US-PAT-NO: 6025152

DOCUMENT-IDENTIFIER: US 6025152 A

TITLE: Denitrifying bacterial preparation and method

DATE-ISSUED: February 15, 2000

INVENTOR - INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Hiatt; William N. Long Beach CA 90807

US-CL-CURRENT: 435/42; 435/262, 435/264, 435/832, 435/834, 435/836, 435/839

ABSTRACT:

A method and mixture for denitrifying aerobic bacterial compositions and for aerobic methods for biological treatment of aqueous systems polluted by nitrogen waste products. A mixture of and limited to bacillus bacteria are added to the treatment subject. Optionally enzymes can be added to the mixture. Optionally a particulate carbon ingredient can be placed into the treatment subject. Optionally a living tissue ingredient can be used.

29 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation		Classification		Attachments	KWIC
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63. Document ID: US 6017751 A

L2: Entry 63 of 80

File: USPT

Jan 25, 2000

US-PAT-NO: 6017751

DOCUMENT-IDENTIFIER: US 6017751 A

TITLE: Process and composition for desizing cellulosic fabric with an enzyme hybrid

DATE-ISSUED: January 25, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
von der Osten; Claus	Lyngby			DK
Bjornvad; Mads E.	Frederiksberg			DK
Vind; Jesper	Lyngby			DK
Rasmussen; Michael Dolberg	Vallensbaek			DK

US-CL-CURRENT: 435/263; 435/198, 435/202, 435/69.7, 435/71.1, 510/530

ABSTRACT:

Cellulose-containing fabric is desized by treating with an enzyme hybrid having a catalytically active amino acid sequence of an enzyme such as a lipase or an amylase linked to an amino acid sequence containing a cellulose-binding domain. The enzyme amino acid sequence may be of an .alpha.-amylase obtainable from a species of Bacillus such as Bacillus licheniformis, or of a lipase obtainable from a species of Humicola, Candida, Pseudomonas or Bacillus. The cellulose-binding domain may be from a cellulase, a xylanase, a mannanase, an arabinofuranosidase, an acetylesterase or a chitinase. The enzyme hybrid is obtained from a transformed host cell containing an expression cassette having a DNA sequence encoding the enzyme hybrid. A desizing composition is formed containing the enzyme hybrid and a wetting agent.

9 Claims, 0 Drawing figures Exemplary Claim Number: 1



64. Document ID: US 6015783 A

L2: Entry 64 of 80

File: USPT

Jan 18, 2000

US-PAT-NO: 6015783

DOCUMENT-IDENTIFIER: US 6015783 A

TITLE: Process for removal or bleaching of soiling or stains from cellulosic fabric

DATE-ISSUED: January 18, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY von der Osten; Claus Lyngby DK CA Cherry; Joel R. Davis DK Bjornvad; Mads E. Frederiksberg DK Vind; Jesper Lyngby Vallensbaek DK Rasmussen; Michael Dolberg

US-CL-CURRENT: 510/392

ABSTRACT:

The present invention relates to a process for removal or bleaching of soiling or stains present on cellulosic fabric, wherein the fabric is contacted in aqueous medium with a modified enzyme (enzyme hybrid) which comprises a catalytically active amino acid sequence of a non-cellulolytic enzyme linked to an amino acid sequence comprising a cellulose-binding domain. The invention further relates to a detergent composition comprising an enzyme hybrid of the type in question and a surfactant, and to a process for washing soiled or stained cellulosic fabric, wherein the fabric is washed in an aqueous medium to which is added such a detergent composition.

11 Claims, 0 Drawing figures Exemplary Claim Number: 1

K\0\0

65. Document ID: US 5997584 A

L2: Entry 65 of 80

File: USPT

Dec 7, 1999

US-PAT-NO: 5997584

DOCUMENT-IDENTIFIER: US 5997584 A

** See image for Certificate of Correction **

TITLE: Method of treating polyester fabrics

DATE-ISSUED: December 7, 1999

INVENTOR-INFORMATION:

CITY STATE ZIP CODE COUNTRY NAME DK Andersen; Bente Konggaard Lyngby K.o slashed.benhavn K DK Borch; Kim JΡ Abo; Masanobu Chiba-ken CH Damqaard; Bo Lausanne

US-CL-CURRENT: 8/137; 435/263, 435/264, 510/300, 8/137.5, 8/401

ABSTRACT:

This invention relates to a method of reducing the pilling propensity or colour clarity of polyester fabrics and/or garments, which method comprises treating the fabric with a polyester hydrolytic enzyme and a detergent.

10 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KMIC

66. Document ID: US 5976855 A

L2: Entry 66 of 80

File: USPT

Nov 2, 1999

US-PAT-NO: 5976855

DOCUMENT-IDENTIFIER: US 5976855 A

TITLE: Method of preparing a variant of a lipolytic enzyme

DATE-ISSUED: November 2, 1999

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Svendsen; Allan Birker.o slashed.d DK Clausen; Ib Groth Hiller.o slashed.d DK Okkels; Jens Sigurd Frederiksberg C DK Thellersen; Marianne Frederiksberg C DK

ABSTRACT:

The present invention relates to a method of preparing a variant of a parent lipolytic enzyme, comprising (a) subjecting a DNA sequence encoding the parent lipolytic enzyme to random mutagenesis, (b) expressing the mutated DNA sequence obtained in step (a) in a host cell, and (c) screening for host cells expressing a mutated lipolytic enzyme which has a decreased dependance to calcium and/or an improved tolerance towards a detergent or a detergent component as compared to the parent lipolytic enzyme.

21 Claims, 5 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC

67. Document ID: US 5972873 A

L2: Entry 67 of 80

File: USPT

Oct 26, 1999

US-PAT-NO: 5972873

DOCUMENT-IDENTIFIER: US 5972873 A

TITLE: 4-substituted-phenyl-boronic acids as enzyme stabilizers

DATE-ISSUED: October 26, 1999

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Nielsen; Lone Kierstein Bagsvaerd DK

Deane-Wray; Allison Hampshire GB

US-CL-CURRENT: 510/392; 510/320, 510/321, 510/393, 510/465, 510/530

ABSTRACT:

The present invention relates to a liquid composition comprising an enzyme and a phenyl boronic acid derivative enzyme stabilizer of the following formula: ##STR1## wherein R is selected from the group consisting of hydrogen, hydroxy, C.sub.1 -C.sub.6 alkyl, substituted C.sub.1 -C.sub.6 alkyl, C.sub.1 -C.sub.6 alkenyl and substituted C.sub.1 -C.sub.6 alkenyl.

20 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw, Desc | Image |

k0000

68. Document ID: US 5968883 A

L2: Entry 68 of 80

File: USPT

Oct 19, 1999

US-PAT-NO: 5968883

DOCUMENT-IDENTIFIER: US 5968883 A

TITLE: Peroxidase variants

DATE-ISSUED: October 19, 1999

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Cherry; Joel R. Davis CA

Svendsen; Allan Birker.o slashed.d DK
Damhus; Ture Copenhagen .O slashed. DK
Schneider; Palle Ballerup DK

US-CL-CURRENT: <u>510/305</u>; <u>435/192</u>, <u>510/374</u>, <u>510/392</u>

ABSTRACT:

The present invention relates to novel variants of Coprinus cinereus peroxidase showing excellent hydrogen peroxide stability.

18 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full Title Citation Front Review Classification Date Reference Sequences Attachments KMC |

69. Document ID: US 5919746 A

L2: Entry 69 of 80

File: USPT

Jul 6, 1999

US-PAT-NO: 5919746

DOCUMENT-IDENTIFIER: US 5919746 A

TITLE: Alkaline lipolytic enzyme

DATE-ISSUED: July 6, 1999

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Hirayama; Satoshi Chiba JP Halkier; Torben Birkeroed DK

US-CL-CURRENT: 510/392; 435/198, 510/320, 510/321, 510/393

ABSTRACT:

The present invention relates to an alkaline lipolytic enzyme derivable from a strain of Botryosphaeria or Guignardia, to a lipolytic enzyme-producing microbial strain, to methods for the production of lipolytic enzyme and to a detergent composition comprising the lipolytic enzyme.

9 Claims, 2 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 2



70. Document ID: US 5892013 A

L2: Entry 70 of 80 File: USPT Apr 6, 1999

US-PAT-NO: 5892013

DOCUMENT-IDENTIFIER: US 5892013 A

TITLE: Lipase variants

DATE-ISSUED: April 6, 1999

INVENTOR - INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Svendsen; Allan	Birker.o slashed.d			DK
Patkar; Shamkant Anant	Lyngby			DK
Gormsen; Erik	Virum			DK
Clausen; Ib Groth	Hiller.o slashed.d			DK
Okkels; Jens Sigurd	Frederiksberg			DK
Thellersen; Marianne	Frederiksberg			DK

US-CL-CURRENT: 536/23.2; 435/198, 435/252.3, 435/320.1, 435/69.1, 536/23.7

ABSTRACT:

The present invention relates to lipase variants which exhibit improved properties, detergent compositions comprising said lipase variants, DNA constructs coding for said lipase variants, and methods of making said lipase variants.

39 Claims, 10 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 10

Full Title Citat	n Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw, Desc Image							

KWIC

71. Document ID: US 5869438 A

L2: Entry 71 of 80

File: USPT

Feb 9, 1999

US-PAT-NO: 5869438

DOCUMENT-IDENTIFIER: US 5869438 A

TITLE: Lipase variants

DATE-ISSUED: February 9, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Svendsen; Allan	Birker.o slashed.d			DK
Patkar; Shamkant Anant	Lyngby			DK
Gormsen; Erik	Virum			DK
Okkels; Jens Sigurd	Frederiksberg			DK
Thellersen; Marianne	Frederiksberg			DK

ABSTRACT:

The present invention relates to lipase variants which exhibit improved properties, detergent compositions comprising said lipase variants, DNA constructs coding for said lipase variants, and methods of making said lipase variants.

51 Claims, 10 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 10 Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw, Desc | Image |

KWIC

72. Document ID: US 5681715 A

L2: Entry 72 of 80

File: USPT

Oct 28, 1997

US-PAT-NO: 5681715

DOCUMENT-IDENTIFIER: US 5681715 A

TITLE: Process for preparing lipases

DATE-ISSUED: October 28, 1997

INVENTOR-INFORMATION:

CITY STATE ZIP CODE COUNTRY NAME J.o slashed.rgensen; Steen Troels Alleroed DK Diderichsen; Boerge Krag Birkeroed DK Buckley; Catherine M. Cork ΙE Hobson; Audrey Go. Wicklow ΙE Co. Dublin McConnell; David J. ΙE

US-CL-CURRENT: $\frac{435}{69.1}$; $\frac{435}{198}$, $\frac{435}{252.3}$, $\frac{435}{252.33}$, $\frac{435}{320.1}$, $\frac{435}{325}$, $\frac{435}{69.7}$, $\frac{536}{23.2}$, $\frac{536}{23.4}$, $\frac{536}{23.7}$

ABSTRACT:

A process for producing an active lipase enzyme in vitro, comprising mixing an inactive or partly active lipase enzyme with a chaperone molecule and subjecting the mixture to denaturation followed by renaturation to produce the active lipase enzyme.

39 Claims, 13 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 13

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw, Desc | Image |

KWIC

73. Document ID: US 5427936 A

L2: Entry 73 of 80

File: USPT

Jun 27, 1995

US-PAT-NO: 5427936

DOCUMENT-IDENTIFIER: US 5427936 A

TITLE: Alkaline bacillus lipases, coding DNA sequences therefor and bacilli, which

produce these lipases

DATE-ISSUED: June 27, 1995

INVENTOR-INFORMATION:

STATE ZIP CODE COUNTRY CITY NAME DE Moeller; Bernhard Hanover DE Burgdorf Vetter; Roman Wennigsen DE Wilke; Detlef DE Foullois; Birgit Hanover

US-CL-CURRENT: 435/198; 435/252.1, 536/23.2

ABSTRACT:

The invention relates to alkaline bacillus lipases, DNA sequences, which code for these lipases, a method for isolating and producing these lipases, as well as to bacillus strains, which have the capability to form these lipases. The alkaline lipases are suitable for use in compositions for cleaning, washing and bleaching purposes.

7 Claims, 18 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 15

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Drawe D		mage							

74. Document ID: DE 4111321 A1

L2: Entry 74 of 80

File: EPAB

Oct 17, 1991

PUB-NO: DE004111321A1

DOCUMENT-IDENTIFIER: DE 4111321 A1

TITLE: New alkaline lipase from Bacillus species - used in low temp., washing, cleaning etc. compsns., also encoding deoxyribonucleic acid, vectors and transformed

microorganisms

PUBN-DATE: October 17, 1991

INVENTOR-INFORMATION:

NAME

MOELLER, BERNHARD

VETTER, ROMAN DIPL BIOL DR

WILKE, DETLEF DIPL BIOL DR

FOULLOIS, BIRGIT DIPL BIOL

DE

INT-CL (IPC): C11D 3/386; C12N 1/21; C12N 9/20; C12N 15/55; C12N 15/75; D06L 3/02 EUR-CL (EPC): C11D003/386; C12N009/20, C12N015/55

ABSTRACT:

New lipases (I), secreted by Bacillus species, have pH optimum in the alkaline range and temp. optimum 30-40 deg C. Also new are (i) DNA sequences (II) encoding a Bacillus lipase having aminoacid sequence at least 70 (90)% homologous with a sequence (A), (2) transformation vectors contg. (II); (3) transformed microorganisms contg. these vectors; and (4) the Bacillus pumilus strains DSM 5776, 5777 and 5778. (A) contains 213 amino acids (including the signal sequence) and is reproduced in the specification together with the encoding DNA sequence (793 bp). USE/ADVANTAGE - Useful in washing, cleaning, bleaching and dishwashing compsns. used at 30-40 deg C. The compsns. pref. also contain a protease.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments |

KWIC

75. Document ID: CN 1370829 A

L2: Entry 75 of 80

File: DWPI

Sep 25, 2002

DERWENT-ACC-NO: 2003-060341

DERWENT-WEEK: 200306

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TITLE: Bacterial spawn for treating domestic organic garbage

INVENTOR: ZHAO, G

PRIORITY-DATA: 2001CN-0107596 (February 27, 2001)

PATENT-FAMILY:

 PUB-NO
 PUB-DATE
 LANGUAGE
 PAGES
 MAIN-IPC

 CN 1370829 A
 September 25, 2002
 000
 C12N001/20

INT-CL (IPC): B09 B 3/00; C12 N 1/20; C12 S 13/00

ABSTRACTED-PUB-NO: CN 1370829A

BASIC-ABSTRACT:

NOVELTY - The present invention relates to a mixture of several kinds of bacterial spawns, especially bacterial spawn mixture capable of treating domestic organic garbage. The mixture consists of Bacillus megaterium Bacillus cereus, Bacillus lichen formis, Bacillus pumilus, <a href="Bacillus thermophilus and Bacillus subtilis generating proteinanse, Lipase, amylase, chitinase, cellulase, oxidase, etc. separately to decompose macromolecular matter into low molecular matters and to convert the low molecular matters into CO2, H2O and small amount of NH3 of exhaust while releasing energy and eliminating bad smell and pollution. The product invention is used to reduce amount of garbage.

Full Title Citation Front Review Classification Date Reference Sequences Attachments

Draws Desc Image

KWIC

76. Document ID: KR 2002004477 A

L2: Entry 76 of 80

File: DWPI

Jan 16, 2002

DERWENT-ACC-NO: 2002-497539

DERWENT-WEEK: 200254

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TITLE: Microbial adsorbent matrix for treating garbage

INVENTOR: KOO, Y H; SEO, D J ; SEO, H H

PRIORITY-DATA: 2000KR-0038385 (July 5, 2000)

PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE PAGES MAIN-IPC KR 2002004477 A January 16, 2002 000 C12N001/00

INT-CL (IPC): $C12 \times 1/00$

ABSTRACTED-PUB-NO: KR2002004477A

BASIC-ABSTRACT:

NOVELTY - A microbial adsorbent matrix for treating garbage. <u>Bacillus pumilus</u> removes odor of ammonia, <u>Bacillus</u> subtilis activates <u>lipase</u>, <u>Bacillus</u> sp. activates antibiosis, Thiobacillus sp. reduces hydrogen sulfide, Cellulomonas fimi activates cellulase, and Streptomyces sp. activates protease. Therefore, garbage is treated efficiently by the microbial adsorbent matrix.

DETAILED DESCRIPTION - The microbial adsorbent is prepared by (i) culturing microbes, Bacillus pumilus, Bacillus subtilis, Bacillus sp., Thiobacillus sp., Cellulomonas fimi, and Streptomyces sp.; (ii) mixing those bacteria with an adsorbent selected from celite, zeolite, vermiculite, white carbon, activated carbon and alginic acid to inoculate in the adsorbent; (iii) fixing for 12 hours at 30-40 deg.C; and (iv) mixing with 5kg of a mixture comprising defatted rice bran 65 wt.%, wheat bran 25 wt.%, bean cake 9 wt.%, and yeast extract 1 wt.%.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw, Desc | Image |

KWMC

77. Document ID: KR 354655 B KR 2001111240 A

L2: Entry 77 of 80

File: DWPI

Sep 30, 2002

DERWENT-ACC-NO: 2002-390563

DERWENT-WEEK: 200324

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TITLE: Novel <u>Bacillus pumilus</u> br060 (kccm 10184) with a particular reactivity to optical isomers and its use, <u>lipase</u> produced from it, Escherichia coli publ (kccm 10185) transformed by DNA coding the <u>lipase</u> and its uses

INVENTOR: CHO, J G; KIM, S R; LIM, S M; OH, S Y; SONG, S W; CHO, J K; YIM, S M

PRIORITY-DATA: 2000KR-0031807 (June 9, 2000)

PATENT-FAMILY:

 PUB-NO
 PUB-DATE
 LANGUAGE
 PAGES
 MAIN-IPC

 KR 354655 B
 September 30, 2002
 000
 C12N001/20

 KR 2001111240 A
 December 17, 2001
 000
 C12N001/20

INT-CL (IPC): C12 N 1/20

ABSTRACTED-PUB-NO: KR2001111240A

BASIC-ABSTRACT:

NOVELTY - Novel Bacillus pumilus BR060 (KCCM 10184) with the particular reactivity to optical isomers and its uses and lipase produced from it, Escherichia coli pUBL (KCCM 10185) transformed by DNA coding the lipase and its use, thereby economically and effectively producing

(-)-9-halogeno-3-methyl-10(4-methyl-1-piperazinyl)-7-oxo-2,3-dihydro-7H-p-yrido(1,2,3-de) (1,4)-benzoxazine-6-carboxylic acid.

DETAILED DESCRIPTION - Novel <u>Bacillus pumilus</u> BR060 (KCCM 10184) has <u>lipase-coding DNA</u> represented by a sequence fully defined in the specification, and amino acid sequence fully defined in the specification. A recombinant expression vector plasmid pUBL contains the <u>lipase-coding DNA</u> and a transformed E.coli pUBL. Optical active benzoxazine derivative is manufactured by asymmetrically hydrolyzing ester part of (plus or minus)-9-halogeno-3-methyl-10(4-methyl-1-piperaz-inyl)-7-oxo-2,3-dihydro-7H-pyrido (1,2,3-de) (1,4)-benzoxazine-6-carboxyli c acid ester.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw, Desc | Image |

KWIC

78. Document ID: US 6083737 A

L2: Entry 78 of 80

File: DWPI

Jul 4, 2000

DERWENT-ACC-NO: 2000-451508

DERWENT-WEEK: 200039

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TITLE: New <u>Bacillus pumilus</u> strain and the <u>lipase</u> enzymes it produces, useful in the treatment of wastewater, plumbing system components and animal feed

INVENTOR: LAWLER, D; SMITH, S

PRIORITY-DATA: 1999US-0291061 (April 14, 1999)

PATENT-FAMILY:

 PUB-NO
 PUB-DATE
 LANGUAGE
 PAGES
 MAIN-IPC

 US 6083737 A
 July 4, 2000
 011
 A23K001/18

INT-CL (IPC): A23 K 1/18; B09 B 3/00; C02 F 3/00; C12 N 1/00; C12 N 1/20

ABSTRACTED-PUB-NO: US 6083737A

BASIC-ABSTRACT:

NOVELTY - An isolated microorganism of the strain Bacillus (ATCC 202136), is new.

DETAILED DESCRIPTION - (I) was further identified as Bacillus pumilus GC subgroup B by the Fatty Acid Methyl Ester Analysis method using Trypticase Soy Broth Agar version 3.9 at 28 deg. C of the database of Microcheck Inc., Northfield, Vt.

An INDEPENDENT CLAIM is also included for a composition comprising (I) and one or more other microorganisms.

USE - The bacteria and the composition comprising the bacteria and one or more other microorganisms are useful in the treatment of wastewater, plumbing system components and animal feed (claimed).

DESCRIPTION OF DRAWING(S) - The figure charts the production of lipase enzymes at various points within a temperature range by Bacillus amyloliquefaciens strains RLM-007Ab (ATCC 202133) and RLM-012B (ATCC 202134).

Full Title Citation Front Review Classification Date Reference Sequences Attachments

Draw Desc Clip Img Image

KWAC

79. Document ID: DE 69529080 E WO 9610079 A1 AU 9535176 A FI 9701262 A EP 781328 A1 MX 9702041 A1 BR 9509046 A JP 10506282 W KR 97706388 A US 5912405 A CN 1158636 A MX 200939 B EP 781328 B1

L2: Entry 79 of 80

File: DWPI

Jan 16, 2003

DERWENT-ACC-NO: 1996-200918

DERWENT-WEEK: 200313

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TITLE: Oxidn. of cpds. esp. dyes in soln., used e.g. for bleaching textile dyes - with phenol oxidising enzyme enhanced by addn. of enhancing agent, esp.acetyl:syringone or

syringic acid deriv.

INVENTOR: DAMHUS, T; SCHNEIDER, P

PRIORITY-DATA: 1995DK-0001044 (September 19, 1995), 1994DK-0001109 (September 27, 1994), 1995DK-0000952 (August 25, 1995)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 69529080 E	January 16, 2003		000	C12N009/02
WO 9610079 A1	April 4, 1996	E	056	C12N009/02
AU 9535176 A	April 19, 1996		000	C12N009/02
FI 9701262 A	March 26, 1997		000	C11D000/00
EP 781328 A1	July 2, 1997	E	000	C12N009/02
MX 9702041 A1	June 1, 1997		000	C12N009/02
BR 9509046 A	July 14, 1998		000	C12N009/02
JP 10506282 W	June 23, 1998		059	C12N009/02
KR 97706388 A	November 3, 1997		000	C12N009/02
US 5912405 A	June 15, 1999		000	C11D003/386
CN 1158636 A	September 3, 1997		000	C12N009/02
MX 200939 B	March 6, 2001		000	C11D003/386
EP 781328 B1	December 4, 2002	E	000	C12N009/02

ABSTRACTED-PUB-NO: US 5912405A BASIC-ABSTRACT:

A detergent additive (I) comprises (a) a phenol-oxidising enzyme and (b) an enhancing agent of formula (I) (where A = e.g. -D, -CH=CH-D, -CH=CH-CH=CH-D, -CH=N-D or -N=CH-D, where D = -CO-E, -SO2-E, -N-XY or -N+-XYZ; E = -H, -OH, -R, or -OR; X, Y, Z = H or -R; R = 1-16C, pref. 1-8C alkyl opt. substd. with carboxy, sulpho or amino; B, C = CmH2m+1 where m = 1-5).

Also claimed is a detergent compsn. (II) comprising (a), (b) and a surfactant. Further claimed is a method (III) of oxidising a cpd. with a phenol-oxidising enzyme, characterised by the presence of enhancing agent (b).

Pref. (a) Is a peroxidase and a hydrogen peroxide source, or a laccase or related enzyme together with oxygen. Peroxidases may be derived from soybean, horseradish, Coprinus (e.g. cinereus or macrorhizus), Bacillus (e.g. pumilus) or Mycococcus (e.g. virescens). Lacases may be derived from Trametes (e.g. villosa) or Coprinus (e.g. cinereus), or may be bilirubin oxidase derived from Myrothecium (e.g. verrucaria). Hydrogen peroxide source is the peroxide itself or a precursor, e.g. perborate, percarbonate, peroxicarboxylic acid or a hydrogen peroxide generating enzyme. (b) Is acetosyringone, syringaldehyde, methyl syringate or syringic acid. (I) May be in form of granulate, liquid, slurry or protected enzyme. (II) May additionally contain further enzyme(s), esp. protease, lipase, amylase, cellulase and/or cutinase. In method (III), (b) is 0.01-1000, esp. 1-100mum. (b) May be added at the beginning or during the process.

USE - Used for bleaching textile dyes or colourants, esp. when in soln., e.g. in household or institutional laundering operations, or in process water obtd. during textile processing; transfer of dyes from one fabric to another when the two are washed together may be inhibited. Paper pulp may be bleached, and lignin modified in mfr. of wood composites. Waste water contg. dyes may be treated.

ADVANTAGE - (b) Speed bleaching by (a); some cpds. which cannot normally be bleached by (a) are bleached in presence of (b). ABSTRACTED-PUB-NO:

WO 9610079A EQUIVALENT-ABSTRACTS:

A detergent additive (I) comprises (a) a phenol-oxidising enzyme and (b) an enhancing

agent of formula (I) (where A = e.g. -D, -CH=CH-D, -CH=CH-D, -CH=CH-D, -CH=N-D or -N=CH-D, where D = -CO-E, -SO2-E, -N-XY or -N+-XYZ; E = -H, -OH, -R, or -OR; X, Y, Z = H or -R; R = 1-16C, pref. 1-8C alkyl opt. substd. with carboxy, sulpho or amino; B, C = CmH2m+1 where m = 1-5).

Also claimed is a detergent compsn. (II) comprising (a), (b) and a surfactant. Further claimed is a method (III) of oxidising a cpd. with a phenol-oxidising enzyme, characterised by the presence of enhancing agent (b).

Pref. (a) Is a peroxidase and a hydrogen peroxide source, or a laccase or related enzyme together with oxygen. Peroxidases may be derived from soybean, horseradish, Coprinus (e.g. cinereus or macrorhizus), Bacillus (e.g. pumilus) or Mycococcus (e.g. virescens). Lacases may be derived from Trametes (e.g. villosa) or Coprinus (e.g. cinereus), or may be bilirubin oxidase derived from Myrothecium (e.g. verrucaria). Hydrogen peroxide source is the peroxide itself or a precursor, e.g. perborate, percarbonate, peroxicarboxylic acid or a hydrogen peroxide generating enzyme. (b) Is acetosyringone, syringaldehyde, methyl syringate or syringic acid. (I) May be in form of granulate, liquid, slurry or protected enzyme. (II) May additionally contain further enzyme(s), esp. protease, lipase, amylase, cellulase and/or cutinase. In method (III), (b) is 0.01-1000, esp. 1-100 mu m. (b) May be added at the beginning or during the process.

USE - Used for bleaching textile dyes or colourants, esp. when in soln., e.g. in household or institutional laundering operations, or in process water obtd. during textile processing; transfer of dyes from one fabric to another when the two are washed together may be inhibited. Paper pulp may be bleached, and lignin modified in mfr. of wood composites. Waste water contg. dyes may be treated.

ADVANTAGE - (b) Speed bleaching by (a); some cpds. which cannot normally be bleached by (a) are bleached in presence of (b).

Full Title Citation Front Review Classification Date Reference Sequences Attachments
Draw Desc Clip Img Image

KWAC

80. Document ID: DE 4111321 A KR 236540 B1 WO 9116422 A EP 528828 A1 JP 05505939 W EP 528828 B1 DE 59101948 G ES 2055601 T3 US 5427936 A EP 528828 B2 JP 3112937 B2

L2: Entry 80 of 80

File: DWPI

Oct 17, 1991

DERWENT-ACC-NO: 1991-311800

DERWENT-WEEK: 200114

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TITLE: New alkaline lipase from Bacillus species - used in low temp., washing, cleaning etc. compsns., also encoding deoxyribonucleic acid, vectors and transformed microorganisms

INVENTOR: FOULLOIS, B; MOLLER, B; VETTER, R; WILKE, D; MOELLER, B

PRIORITY-DATA: 1991DE-4111321 (April 8, 1991), 1990DE-4012070 (April 14, 1990)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 4111321 A	October 17, 1991		000	
KR 236540 B1	January 15, 2000		000	C12N009/20
WO 9116422 A	October 31, 1991		000	
EP 528828 A1	March 3, 1993	G	054	C12N009/20
JP 05505939 W	September 2, 1993		018	C12N009/20
EP 528828 B1	June 15, 1994	G	038	C12N009/20
DE 59101948 G	July 21, 1994		000	C12N009/20
ES 2055601 T3	August 16, 1994		000	C12N009/20
US 5427936 A	June 27, 1995		028	C12N009/20
EP 528828 B2	December 3, 1997	G	037	C12N009/20
JP 3112937 B2	November 27, 2000		028	C12N009/20

INT-CL (IPC): C11D 3/38; C11D 3/386; C11D 7/42; C12N 1/20; C12N 1/21; C12N 9/20; C12N 15/09; C12N 15/55; C12R 1/07; C12R 1/07; C12S 11/00; D06L 3/00; D06L 3/02; C12N 1/21; C12R 1/07; C12N 1/21; C12R 1/125; C12N 9/20; C12R 1/07; C12N 15/09; C12R 1/07

ABSTRACTED-PUB-NO: DE 4111321A BASIC-ABSTRACT:

New lipases (I), secreted by Bacillus species, have pH optimum in the alkaline range and temp. optimum 30-40 deg C. Also new are (i) DNA sequences (II) encoding a Bacillus lipase having aminoacid sequence at least 70 (90)% homologous with a sequence (A), (2) transformation vectors contg. (II); (3) transformed microorganisms contg. these vectors; and (4) the Bacillus pumilus strains DSM 5776, 5777 and 5778. (A) contains 213 amino acids (including the signal sequence) and is reproduced in the specification together with the encoding DNA sequence (793 bp).

USE/ADVANTAGE - Useful in washing, cleaning, bleaching and dishwashing compsns. used at 30-40 deg C. The compsns. pref. also contain a protease. ABSTRACTED-PUB-NO:

EP 528828B EQUIVALENT-ABSTRACTS:

New <u>lipases</u> (I), secreted by <u>Bacillus</u> species, have pH optimum in the alkaline range and temp. optimum 30-40 deg C. Also new are (i) DNA sequences (II) encoding a <u>Bacillus lipase</u> having aminoacid sequence at least 70 (90)% homologous with a sequence $\overline{(A)}$, (2) transformation vectors contg. (II); (3) transformed microorganisms contg. these vectors; and (4) the <u>Bacillus pumilus</u> strains DSM 5776, 5777 and 5778. (A) contains 213 amino acids (including the signal sequence) and is reproduced in the specification together with the encoding DNA sequence (793 bp).

USE/ADVANTAGE - Useful in washing, cleaning, bleaching and dishwashing compsns. used at 30-40 deg C. The compsns. pref. also contain a protease.

US 5427936A

Alkaline <u>bacillus lipases</u> isolated from <u>Bacillus pumilus</u> (DSM 5776, 5777 and/or 5778) cleave triglycerides and fatty esters, with optimum activity in alkaline conditions (pH about 9-10) at 30-40 deg.C. The aminoacid sequences of these enzymes are defined.

USE - The new enzymes are components of improved washing, cleaning and bleaching compsns.

ADVANTAGE - The enzymes are relatively stable at temps. up to about 40 deg.C.

Full	Title	Citation	Front	Review Classification	Date	Reference	Sequences	Attachments	KWIC
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	Documents
lipase same bacillus same pumilus	80

Display Format: - Change Format

Previous Page Next Page

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Search Results - Record(s) 1 through 20 of 38 returned.

1. Document ID: US 20030180933 A1

L3: Entry 1 of 38

File: PGPB

Sep 25, 2003

PGPUB-DOCUMENT-NUMBER: 20030180933

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030180933 A1

TITLE: Protease variants and compositions

PUBLICATION-DATE: September 25, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Hansen, Peter Kamp Lejre DK
Bauditz, Peter Kobenhavn O DK
Mikkelsen, Frank Valby DK

US-CL-CURRENT: 435/222; 435/252.31, 435/320.1, 435/69.1, 510/320, 536/23.2

Full Title Citation Front Review Classification Date Reference Sequences Attachments KMC |
Draw Desc Image

2. Document ID: US 20030176304 A1

L3: Entry 2 of 38

File: PGPB

Sep 18, 2003

PGPUB-DOCUMENT-NUMBER: 20030176304

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030176304 A1

TITLE: Protease variants and compositions

PUBLICATION-DATE: September 18, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Hansen, Peter Kamp Lejre DK
Bauditz, Peter Soborg DK
Mikkelsen, Frank Valby DK
Andersen, Kim Vilbour Copenhagen O DK

US-CL-CURRENT: <u>510/226</u>; <u>435/222</u>, <u>435/252.31</u>, <u>435/320.1</u>, <u>435/69.1</u>, <u>510/320</u>, <u>536/23.2</u>

Full Title Citation Front Review Classification Date Reference Sequences Attachments KMC Draw, Desc Image

3. Document ID: US 20030171235 A1

L3: Entry 3 of 38 File: PGPB Sep 11, 2003

PGPUB-DOCUMENT-NUMBER: 20030171235

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030171235 A1

TITLE: Subtilase enzymes

PUBLICATION-DATE: September 11, 2003

INVENTOR - INFORMATION:

COUNTRY NAME CITY STATE RULE-47 DK Hansen, Peter Kamp Lejre Bauditz, Peter Kobenhaven O DK DK Mikkelsen, Frank Valby Andersen, Kim Vilbour Copenhagen O DK Vaerlose DK Andersen, Carsten Norregaard-Madsen, Mads Odense M DK

US-CL-CURRENT: 510/226; 435/222, 435/252.3, 435/320.1, 435/69.1, 510/320, 536/23.2



4. Document ID: US 20030170696 A1

L3: Entry 4 of 38 File: PGPB Sep 11, 2003

PGPUB-DOCUMENT-NUMBER: 20030170696

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030170696 A1

TITLE: Cgtase and dna sequence encoding same

PUBLICATION-DATE: September 11, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Jorgensen, Per LinaKobenhavn KDKFuglsang, Claus CroneVeksoDK

US-CL-CURRENT: $\underline{435}/\underline{6}$; $\underline{426}/\underline{20}$, $\underline{435}/\underline{193}$, $\underline{435}/\underline{320.1}$, $\underline{435}/\underline{325}$, $\underline{435}/\underline{69.1}$, $\underline{435}/\underline{97}$, $\underline{510}/\underline{320}$, $\underline{536}/\underline{23.2}$

Full Title Citation Front Review Classification Date Reference Sequences Attachments

Draw, Desc Image

5. Document ID: US 20030148441 A1

L3: Entry 5 of 38 File: PGPB Aug 7, 2003

PGPUB-DOCUMENT-NUMBER: 20030148441

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030148441 A1

TITLE: Method for preparing polypeptide variants

PUBLICATION-DATE: August 7, 2003

INVENTOR - INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

Okkels, Jens Sigurd

Tokyo

JP

US-CL-CURRENT: 435/69.1; 435/320.1, 435/325, 435/455



6. Document ID: US 20030129707 A1

L3: Entry 6 of 38

File: PGPB

Jul 10, 2003

PGPUB-DOCUMENT-NUMBER: 20030129707

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030129707 A1

TITLE: Crystal harvest from fermentation broth

PUBLICATION-DATE: July 10, 2003

INVENTOR - INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Nielsen, Benny Gislinge DK Rancke-Madsen, Anders Charlottenlund DK Jorgensen, Martin Troen Roskilde DK

US-CL-CURRENT: 435/71.1

Full	Title	Citation	Front	Review	Classification		Sequences	Attachments	KWC
Draw, D	esc li	nage							

7. Document ID: US 20030096390 A1

L3: Entry 7 of 38

File: PGPB

May 22, 2003

PGPUB-DOCUMENT-NUMBER: 20030096390

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030096390 A1

TITLE: Novel lipase genes

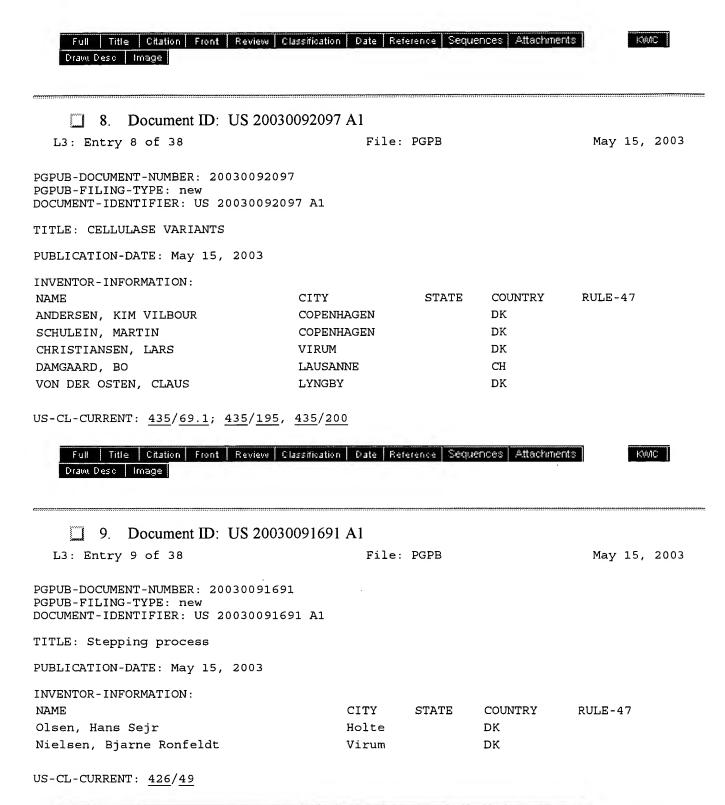
PUBLICATION-DATE: May 22, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Giver, Lorraine J. Santa Clara CA US
Minshull, Jeremy Menlo Park CA US
Vogel, Kurt Palo Alto CA US

US-CL-CURRENT: 435/198; 435/135, 435/320.1, 435/325, 435/69.1, 536/23.2



Full	Title		Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw		Image								
		-								
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	10.	Docume	ent ID:	US 20	030087415	A1				

L3: Entry 10 of 38

File: PGPB

May 8, 2003

PGPUB-DOCUMENT-NUMBER: 20030087415

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030087415 A1

TITLE: Extracellular expression of pectate lyase using Bacillus or Escherichia coli

PUBLICATION-DATE: May 8, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Andersen, Jens Toenne Naerum CA DK Kongsbak, Lars Holte DK Schulein, Martin Davis US Bjornvad, Mads Eskelund Frederiksberg DK

US-CL-CURRENT: 435/232; 435/252.31, 435/320.1, 435/69.1, 536/23.2



File: PGPB

11. Document ID: US 20030046773 A1

L3: Entry 11 of 38

Mar 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030046773

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030046773 A1

TITLE: Preparation of cellulosic materials

PUBLICATION-DATE: March 13, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Xu, Hui Wake Forest NC US NC US Liu, Jiyin Raleigh Otto, Eric St. Louisburg NC US NC US Condon, Brian Wake Forest

US-CL-CURRENT: 8/115.51; 8/101

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw, D	eso Ir	nage								
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12. Document ID: US 20030041387 A1

L3: Entry 12 of 38 File: PGPB Mar 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030041387

 ${\tt PGPUB-FILING-TYPE:} \ \ {\tt new}$

DOCUMENT-IDENTIFIER: US 20030041387 A1

TITLE: Single-bath preparation of cellulosic materials

PUBLICATION-DATE: March 6, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Xu, Hui Wake Forest NC US Liu, Jiyin Raleigh NC US St. Louisburg NC US Otto, Eric US NC Condon, Brian Wake Forest

US-CL-CURRENT: 8/115.51



13. Document ID: US 20030032162 A1

L3: Entry 13 of 38

File: PGPB

Feb 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030032162

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030032162 A1

TITLE: Family 44 xyloglucanases

PUBLICATION-DATE: February 13, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Schnorr, KirkHolteCADKJorgensen, Per LinaCopenhagenDKSchulein, MartinDavisUS

US-CL-CURRENT: 435/200; 435/252.3, 435/320.1, 435/69.1, 536/23.2

	Full			Front	Review	Classification	Date	Reference	Sequences	Attachments	KOA	AC .
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14. Document ID: US 20030022807 A1

L3: Entry 14 of 38

File: PGPB

Jan 30, 2003

PGPUB-DOCUMENT-NUMBER: 20030022807

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030022807 A1

TITLE: Family 5 xyloglucanases

PUBLICATION-DATE: January 30, 2003

INVENTOR - INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Wilting, Reinhard Farum DK
Bjornvad, Mads Eskelund Frederiksberg DK
Kauppinen, Markus Sakari Smorum DK
Schulein, Martin Copenhagen DK
Dela, Hanne Copenhagen DK

US-CL-CURRENT: 510/392

Full Title Citation Front Review Classification Date Reference Sequences Attachments KMC |
Draw, Desc | Image |

15. Document ID: US 20020192792 A1

L3: Entry 15 of 38 File: PGPB Dec 19, 2002

PGPUB-DOCUMENT-NUMBER: 20020192792

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020192792 A1

TITLE: Laccase mutants

PUBLICATION-DATE: December 19, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Schneider, PalleBallerupDKDanielsen, SteffenCopenhagenDKSvendsen, AllanHoersholmDK

US-CL-CURRENT: 435/200; 435/320.1, 435/325, 435/69.1, 536/23.2



16. Document ID: US 20020183506 A1

L3: Entry 16 of 38 File: PGPB Dec 5, 2002

PGPUB-DOCUMENT-NUMBER: 20020183506

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020183506 A1

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

PUBLICATION-DATE: December 5, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Danielsen, Steffen Copenhagen DK Schneider, Palle Ballerup DK

US-CL-CURRENT: 536/23.2; 435/189, 435/320.1, 435/325, 435/69.1



17. Document ID: US 20020178509 A1

L3: Entry 17 of 38 File: PGPB Dec 5, 2002

PGPUB-DOCUMENT-NUMBER: 20020178509

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020178509 A1

TITLE: Reduction of malodor from laundry

PUBLICATION-DATE: December 5, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Johansen, Charlotte Holte DK Munk, Signe Copenhagen K DK

US-CL-CURRENT: 8/137; 510/392



18. Document ID: US 20020155575 A1

L3: Entry 18 of 38

File: PGPB

Oct 24, 2002

PGPUB-DOCUMENT-NUMBER: 20020155575

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020155575 A1

TITLE: Subtilase variants

PUBLICATION-DATE: October 24, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Norregaard-Madsen, Mads Birkerod DK
Larsen, Line Bloch Haspegardsvej DK
Hansen, Peter Kamp Lejre DK

US-CL-CURRENT: 435/222; 435/252.3, 435/320.1, 435/69.1, 510/306, 536/23.2

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19. Document ID: US 20020137655 A1

L3: Entry 19 of 38

File: PGPB

Sep 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020137655

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020137655 A1

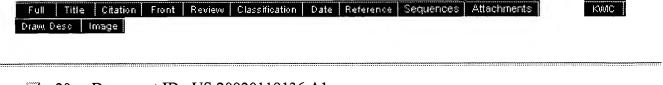
TITLE: Use of haloperoxidase, peroxide and carboxylic acid

PUBLICATION-DATE: September 26, 2002

INVENTOR-INFORMATION:

STATE RULE-47 CITY COUNTRY NAME Holte DK Johansen, Charlotte DK Copenhagen O Nielsen, Michael Skovgaard DK Schneider, Palle Ballerup Vaerloese DK Johansen, Jeanette Theil

US-CL-CURRENT: 510/392; 510/305



20. Document ID: US 20020119136 A1

L3: Entry 20 of 38

File: PGPB

Aug 29, 2002

PGPUB-DOCUMENT-NUMBER: 20020119136

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020119136 A1

TITLE: Antimicrobial peroxidase compositions

PUBLICATION-DATE: August 29, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

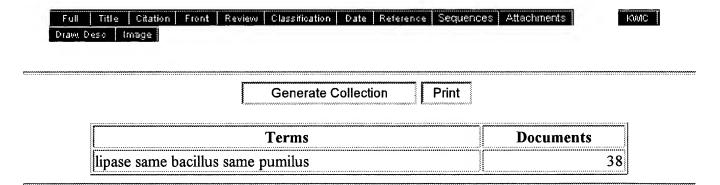
RULE-47

Johansen, Charlotte

Holte

DK

US-CL-CURRENT: 424/94.4; 424/195.15, 424/616



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21. Document ID: US 20020115194 A1

L3: Entry 21 of 38

File: PGPB

Aug 22, 2002

PGPUB-DOCUMENT-NUMBER: 20020115194

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020115194 A1

TITLE: Biopreparation of textiles at high temperatures

PUBLICATION-DATE: August 22, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

NC US Lange, Niel Erik Krebs Raleigh Kongsbak, Lars Holte NC DK Shulein, Martin Copenhagen DK Frederiksberg Bjornvad, Mads Eskelund DK Husain, Philip Anwar Wake Forest US

US-CL-CURRENT: 435/263

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Draw, Desc | Image |

KORAC

22. Document ID: US 20020110620 A1

L3: Entry 22 of 38

File: PGPB

Aug 15, 2002

PGPUB-DOCUMENT-NUMBER: 20020110620

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020110620 A1

TITLE: Particles containing active in visco-elastic liquids

PUBLICATION-DATE: August 15, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

Bach, Poul

Birkerod

DK

US-CL-CURRENT: 426/62; 427/213, 427/242, 428/403, 510/392

Full Title Citation Front Review Classification Date Reference Sequences Attachments

Draw, Desc Image

KWiC

23. Document ID: US 20020106511 A1

L3: Entry 23 of 38 File: PGPB Aug 8, 2002

PGPUB-DOCUMENT-NUMBER: 20020106511

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020106511 A1

TITLE: Encapsulation of compounds in vesicles

PUBLICATION-DATE: August 8, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Callisen, Thomas Honger Frederiksberg C DK

US-CL-CURRENT: 428/402.2



24. Document ID: US 20020102702 A1

L3: Entry 24 of 38 File: PGPB Aug 1, 2002

PGPUB-DOCUMENT-NUMBER: 20020102702

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020102702 A1

TITLE: Protease variants and compositions

PUBLICATION-DATE: August 1, 2002

INVENTOR-INFORMATION:

STATE COUNTRY RULE-47 NAME CITY Osten, Claus von der Lyngby DK Halkier, Torben Birkerod DK Andersen, Carsten Vaerloese DK Bauditz, Peter Copenhagen DK Hansen, Peter Kamp Lejre DK

US-CL-CURRENT: 435/222; 435/252.3, 435/320.1, 435/69.1, 510/226, 510/305, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
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25. Document ID: US 20020102246 A1

L3: Entry 25 of 38 File: PGPB Aug 1, 2002

PGPUB-DOCUMENT-NUMBER: 20020102246

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020102246 A1

TITLE: Antimicrobial compositions

PUBLICATION-DATE: August 1, 2002

INVENTOR - INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Schneider, Palle Lynge DK
Moller, Soren Holte DK
Biedermann, Kirsten Horsholm DK
Johansen, Charlotte Holte DK

US-CL-CURRENT: 424/94.4; 424/401, 510/320



26. Document ID: US 20020094331 A1

L3: Entry 26 of 38

File: PGPB

Jul 18, 2002

PGPUB-DOCUMENT-NUMBER: 20020094331

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020094331 A1

TITLE: ANTIMICROBIAL COMPOSITION CONTAINING AN OXIDOREDUCTASE AND AN ENHANCER OF THER

N-HYDROXYANILIDE-TYPE

PUBLICATION-DATE: July 18, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

JOHANSEN, CHARLOTTE HOLTE DK
DEUSSEN, HEINZ-JOSEF SOEBORG DK

US-CL-CURRENT: <u>424/94.4</u>; <u>435/405</u>



27. Document ID: US 20020081738 A1

L3: Entry 27 of 38

File: PGPB

Jun 27, 2002

PGPUB-DOCUMENT-NUMBER: 20020081738

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020081738 A1

TITLE: Coated particles containing an active

PUBLICATION-DATE: June 27, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Simonsen, Ole Soborg DK
Bach, Poul Birkerod DK

US-CL-CURRENT: 435/459; 424/9.52

Jun 20, 2002

Title Citation Front Review Classification Date Reference Sequences Attachments 28. Document ID: US 20020076790 A1

File: PGPB

PGPUB-DOCUMENT-NUMBER: 20020076790

PGPUB-FILING-TYPE: new

L3: Entry 28 of 38

DOCUMENT-IDENTIFIER: US 20020076790 A1

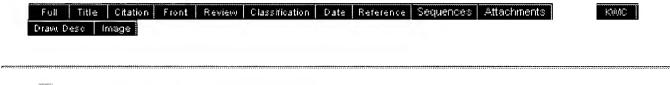
TITLE: 2,6-beta-D-fructan hydrolase enzyme and processes for using the enzyme

PUBLICATION-DATE: June 20, 2002

INVENTOR-INFORMATION:

COUNTRY NAME CITY STATE RULE-47 Moller, Soren Holte DK Johansen, Charlotte Holte DK Schafer, Thomas Farum DK Ostergaard, Peter Rahbek Virum DK Hoeck, Lisbeth Hedegaard Skodsborg DK

US-CL-CURRENT: 435/200; 435/101, 435/320.1, 435/325, 435/69.1, 536/23.2



29. Document ID: US 20020072086 A1

L3: Entry 29 of 38

File: PGPB

Jun 13, 2002

PGPUB-DOCUMENT-NUMBER: 20020072086

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020072086 A1

TITLE: POLYPEPTIDES HAVING HALOPEROXIDASE ACTIVITY

PUBLICATION-DATE: June 13, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

Danielsen, Steffen

Copenhagen

DK

Schneider, Palle

Ballerup DK

US-CL-CURRENT: 435/41; 435/189, 435/69.1, 510/320

	Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
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30. Document ID: US 20020066144 A1

L3: Entry 30 of 38

File: PGPB

Jun 6, 2002

PGPUB-DOCUMENT-NUMBER: 20020066144

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020066144 A1

TITLE: Redeposition or backstain inhibition during stonewashing process

PUBLICATION-DATE: June 6, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

Uyama, Naoto

Chiba-prefecture

JΡ

Daimon, Kosaku

Chiba-ken

JΡ

US-CL-CURRENT: 8/115.51



31. Document ID: US 20020058320 A1

L3: Entry 31 of 38

File: PGPB

May 16, 2002

PGPUB-DOCUMENT-NUMBER: 20020058320

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020058320 A1

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

PUBLICATION-DATE: May 16, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

Danielsen, Steffen

Copenhagen

DK

Schneider, Palle

Ballerup

DK

US-CL-CURRENT: 435/189; 435/320.1, 435/325, 435/69.1, 536/23.2



32. Document ID: US 20020028754 A1

L3: Entry 32 of 38

File: PGPB

Mar 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020028754

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020028754 A1

TITLE: Antimicrobial compositions

PUBLICATION-DATE: March 7, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE COUNTRY

RULE-47

Johansen, Charlotte

Holte

DK

Aaslyng, Dorrit

Vaerlose

DK

US-CL-CURRENT: 510/302; 510/205, 510/309, 510/392



33. Document ID: US 20020020668 A1

L3: Entry 33 of 38

File: PGPB

Feb 21, 2002

PGPUB-DOCUMENT-NUMBER: 20020020668

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020020668 A1

TITLE: Microfiltration using activated carbon

PUBLICATION-DATE: February 21, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Laustsen, Mads Aage Lyngby DK
Nielsen, Soren Bo Vaerlose DK
Jakobsen, Sune Vaerlose DK
Hansen, Kim Uhre Kalundborg DK

US-CL-CURRENT: 210/639; 210/650



34. Document ID: US 20020009435 A1

L3: Entry 34 of 38

File: PGPB

Jan 24, 2002

PGPUB-DOCUMENT-NUMBER: 20020009435

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020009435 A1

TITLE: Polypeptides having haloperoxidase activity

PUBLICATION-DATE: January 24, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Schneider, Palle Lynge DK
Danielsen, Steffen Copenhagen O DK

US-CL-CURRENT: 424/94.4; 435/189, 435/325, 435/69.1, 510/226, 510/300, 536/23.2



35. Document ID: US 20020009434 A1

L3: Entry 35 of 38

File: PGPB

Jan 24, 2002

PGPUB-DOCUMENT-NUMBER: 20020009434

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020009434 A1

TITLE: Polypeptides having haloperoxidase activity

PUBLICATION-DATE: January 24, 2002

INVENTOR-INFORMATION:

NAME

CITY

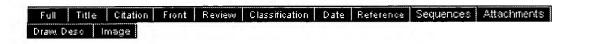
STATE

COUNTRY RULE-47

Danielsen, Steffen Schneider, Palle Copenhagen Ballerup

DK DK

US-CL-CURRENT: 424/94.4; 435/189, 510/226, 510/320



KWC

36. Document ID: US 20020007052 A1

L3: Entry 36 of 38

File: PGPB

Jan 17, 2002

PGPUB-DOCUMENT-NUMBER: 20020007052

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020007052 A1

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

PUBLICATION-DATE: January 17, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY RULE-47

Schneider, Palle

Lynge

DK

Danielsen, Steffen

Copenhagen O

DK

US-CL-CURRENT: 536/23.2; 435/189, 435/325, 435/69.1

Full Title Citation Front Review Classification Date Reference Sequences Attachments

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37. Document ID: US 20020006652 A1

L3: Entry 37 of 38

File: PGPB

Jan 17, 2002

PGPUB-DOCUMENT-NUMBER: 20020006652

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020006652 A1

TITLE: Nucleic acids encoding polypeptides having haloperoxidase activity

PUBLICATION-DATE: January 17, 2002

INVENTOR - INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

Danielsen, Steffen

Copenhagen O

DK

Schneider, Palle

Ballerup

DK

US-CL-CURRENT: 435/189; 435/325, 435/69.1, 536/23.2



38. Document ID: US 20010025018 A1

L3: Entry 38 of 38

File: PGPB

Sep 27, 2001

PGPUB-DOCUMENT-NUMBER: 20010025018

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010025018 A1

TITLE: Antimicrobial activity of laccases

PUBLICATION-DATE: September 27, 2001

INVENTOR-INFORMATION:

NAME

CITY

STATE COUNTRY RULE-47

Johansen, Charlotte

Holte

DK

Pedersen, Anders Hjelholt Fuglsang, Claus Crone

Lyngby Nivaa

DK DK

US-CL-CURRENT: 510/305; 510/306, 510/392



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CN Butanoic acid, 1,2,3-propanetriyl ester (9CI) (CA INDEX NAME)
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   Glycerol tributanoate
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    Tri-n-butyrin
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    Tributin
CN
   Tributyrin
CN
    Tributyroin
   Tributyryl glyceride
CN
    Tributyrylglycerol
    3D CONCORD
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                -O-CH2
 n-Pr_C_O_CH2_CH_O_C_Pr-n
=> s nerylbutrylate/cn
L2 0 NERYLBUTRYLATE/CN
=> s nerylbutryate/cn
           O NERYLBUTRYATE/CN
=> s neryl-butryate/cn
            O NERYL-BUTRYATE/CN
=> s geranylbutrate/cn
           O GERANYLBUTRATE/CN
=> s geranyl-butrate/cn
            O GERANYL-BUTRATE/CN
L6
=> s nerylol/cn
          O NERYLOL/CN
=> s neryl alchol/cn
T8
           O NERYL ALCHOL/CN
=> s geranol/cn
           1 GERANOL/CN
L9
=> d
   ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
L9
RN 163063-26-1 REGISTRY
```

CN Geranol (9CI) (CA INDEX NAME)

ENTE A plant extract similar to rosanol (Russia)

```
MAN
CI
SR
     CA
LC
     STN Files:
                 AQUIRE, CA, CAPLUS, TOXCENTER
*** STRUCTURE DIAGRAM IS NOT AVAILABLE
               4 REFERENCES IN FILE CA (1907 TO DATE)
                1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
                4 REFERENCES IN FILE CAPLUS (1907 TO DATE)
=> s pentadecanolide/cn
           1 PENTADECANOLIDE/CN
L10
=> d
L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
     106-02-5 REGISTRY
     Oxacyclohexadecan-2-one (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Pentadecanoic acid, 15-hydroxy-, .xi.-lactone (6CI, 7CI)
OTHER NAMES:
    1,15-Pentadecanolide
     1-Oxacyclohexadecan-2-one
CN
CN
    15-Hydroxypentadecanoic acid lactone
CN
    15-Pentadecanolide
CN
    2-Pentadecalone
CN
    cpd Supra
CN
    CPE 215
     Cyclopentadecanolide
CN
CN
     Exaltolide
CN
     Muskalactone
    NSC 36763
CN
CN
     Pentadecalactone
CN
     Pentadecanolactone
CN
     Pentadecanolide
CN
     Pentalide
CN
     Thibetolide
     3D CONCORD
FS
DR
     81031-90-5
MF
     C15 H28 O2
CT
     COM
LC
     STN Files:
                  AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA,
       CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM,
       DETHERM*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MRCK*, MSDS-OHS, NAPRALERT, PROMT, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL, VTB
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
=> s oxacyclotridecan/cn
            0 OXACYCLOTRIDECAN/CN
L11
=> file .nash
=> s lipase and bacillus
           201 FILE MEDLINE
L12
           992 FILE CAPLUS
L13
           316 FILE SCISEARCH
L14
           152 FILE LIFESCI
L15
```

Unspecified

ΜF

L16

545 FILE BIOSIS

L17 182 FILE EMBASE

TOTAL FOR ALL FILES

2388 LIPASE AND BACILLUS L18

=> s 118 and pumilus TOTAL FOR ALL FILES

82 L18 AND PUMILUS

=> s 125 not 2002-2003/py L40 3 FILE MEDLINE L41 24 FILE CAPLUS 8 FILE SCISEARCH L42 L43 9 FILE LIFESCI 15 FILE BIOSIS 1.44 L45 3 FILE EMBASE

TOTAL FOR ALL FILES

62 L25 NOT 2002-2003/PY 1.46

=> dup rem 146

PROCESSING COMPLETED FOR L46

32 DUP REM L46 (30 DUPLICATES REMOVED)

=> d ibib abs 1-32

L47 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:57144 CAPLUS

DOCUMENT NUMBER: 134:97749

Enzyme producing strain of Bacillus

INVENTOR(S): Lawler, David; Smith, Steven PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA SOURCE:

U.S., 10 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----------US 6177012 B1 20010123 US 1999-291053 19990414 US 1999-291053 PRIORITY APPLN. INFO.: 19990414

AB This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the

degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 2 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:43465 CAPLUS

DOCUMENT NUMBER: 134:83365

TITLE: Enzyme-producing strain of Bacillus bacteria

INVENTOR(S): Lawler, David; Smith, Steven PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA

U.S., 11 pp. CODEN: USXXAM SOURCE:

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ---------US 6174718 B1 20010116 US 1999-291057 19990414 PRIORITY APPLN. INFO.: US 1999-291057 19990414 AB This invention presents a newly discovered, novel strain of

Bacillus bacteria that produces lipase enzymes for the degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others. Thus, Paenibacillus macerans ATCC 202135 was shown to produce lipolytic, amylolytic, and proteolytic activities by producing zones of clearing on plate diffusion tests.

REFERENCE COUNT:

35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 3 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2001:25709 CAPLUS

DOCUMENT NUMBER:

134:83362

TITLE:

Enzyme-producing strain of Bacillus bacteria

INVENTOR(S): PATENT ASSIGNEE(S):

Lawler, David; Smith, Steven Roebic Laboratories, Inc., USA

SOURCE:

U.S., 11 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE PATENT NO. APPLICATION NO. DATE -----US 1999-291056 19990414 1999-291056 19990414 US 6171848 B1 20010109 PRIORITY APPLN. INFO.: US 1999-291056

This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the

degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others. Thus, Bacillus amyloliquefaciens ATCC 202133 was shown to produce lipolytic, amylolytic, and proteolytic activities by producing

zones of clearing on plate diffusion tests.

REFERENCE COUNT:

34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 4 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:25708 CAPLUS

DOCUMENT NUMBER:

134:83361

TITLE: Enzyme-producing strain of Bacillus bacteria

INVENTOR(S): Lawler, David; Smith, Steven PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA

SOURCE: U.S., 10 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE _____ ----------US 6171847 B1 20010109 US 1999-291055 19990414 PRIORITY APPLN. INFO.: US 1999-291055 19990414

This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch.

This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others. Thus, Bacillus amyloliquefaciens ATCC 202134 was shown to

produce lipolytic, amylolytic, and proteolytic activities by producing zones of clearing on plate diffusion tests.

REFERENCE COUNT:

34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 5 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1 ACCESSION NUMBER: 2001:315330 CAPLUS DOCUMENT NUMBER: 135:269120 TITLE: Over-expression and properties of a purified recombinant Bacillus licheniformis lipase: a comparative report on Bacillus lipases AUTHOR(S): Nthangeni, M. B.; Patterton, H.-G.; van Tonder, A.; Vergeer, W. P.; Litthauer, D. CORPORATE SOURCE: Department of Microbiology and Biochemistry, University of the Free State, Bloemfontein, 9300, S. Afr. SOURCE: Enzyme and Microbial Technology (2001), 28(7-8), 705-712 CODEN: EMTED2; ISSN: 0141-0229 Elsevier Science Ireland Ltd. PUBLISHER: DOCUMENT TYPE: Journal LANGUAGE: English The gene coding for an extracellular lipase of Bacillus licheniformis was cloned using PCR techniques. The sequence corresponding to the mature lipase was subcloned into the pET 20b(+) expression vector to construct a recombinant lipase protein contg. 6 histidine residues at the C-terminal. High-level expression of the lipase by Escherichia coli cells harboring the lipase gene-contg. expression vector was obsd. upon induction with IPTG at 30.degree.. A one step purifn. of the recombinant lipase was achieved with Ni-NTA resin. The specific activity of the purified enzyme was 130 units/mg with p-nitrophenyl-palmitate as substrate. The enzyme showed max. activity at pH 10-11.5 and was remarkably stable at alk. pH values up to 12. The enzyme was active toward p-nitrophenyl esters of short to long chains fatty acids but with a marked preference for esters with C6 and C8 acyl groups. The amino acid sequence of the lipase shows striking similarities to lipases from Bacillus subtilis and Bacillus pumilus. Based on the amino acid identity and biochem. characteristics, we propose that Bacillus lipases be classified into two distinct subfamilies of their own. REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L47 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 2001:455510 CAPLUS DOCUMENT NUMBER: 135:192773 TITLE: Characterization of bacteriocin N15 produced by Enterococcus faecium N15 and cloning of the related genes AUTHOR(S): Losteinkit, Chanvadee; Uchiyama, Keiji; Ochi, Shuichiro; Takaoka, Tomoyo; Nagahisa, Keisuke; Shioya, Department of Biotechnology, Graduate School of CORPORATE SOURCE: Engineering, Osaka University, Suita, 565-0871, Japan Journal of Bioscience and Bioengineering (2001), SOURCE: 91(4), 390-395 CODEN: JBBIF6; ISSN: 1389-1723 PUBLISHER: Society for Bioscience and Bioengineering, Japan

DOCUMENT TYPE: Journal LANGUAGE: English Enterococcus faecium N15 was isolated from nuka (Japanese rice-bran paste), which is utilized as starter in the fermenting of vegetables, and was found to produce a bacteriocin that exhibited a broad spectrum of activity, including activity against Listeria monocytogenes and Bacillus circulans JCM2504. The bacteriocin was sensitive to proteases (.alpha.-chymotrypsin, proteinase K, trypsin, and pepsin) and .alpha.-amylase, but it was resistant to lipase. The bacteriocin was resistant to heat treatment at 100.degree.C for 2 h, but its activity was completely lost after autoclaving at 121.degree.C for 15 min. It was active over a wide pH range from 2.0 to 10.0. The bacteriocin showed bactericidal activity against Lactobacillus sake ${\sf JCM1157}$ at a concn. of 40 AU/mL. Its mol. wt. was estd. by SDS-PAGE to be about 3-5 kDa. PCR primers were designed based on the conserved amino

acid sequences of class IIa bacteriocins. A 3-kb DNA fragment was amplified and three open reading frames (ORFs) were found. The first encodes a probable immunity protein of 103 amino acid residues and shows complete homol. with the putative immunity protein of E. faecium DPC1146. The second and third ORFs resp. encode a probable transposase gene and an inducing factor. The upstream region of the immunity gene, in which the bacteriocin structural gene is located, was amplified. A homol. search revealed that the bacteriocin produced by E. faecium N15 exhibits complete identity to enterocin A, a bacteriocin produced by E. faecium DPC1146. PCR using the primers designed in this study is a rapid and sufficient method of screening for bacteriocin-producing strains.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 7 OF 32 MEDLINE on STN DUPLICATE 2

ACCESSION NUMBER: 2001483947 MEDLINE

DOCUMENT NUMBER: 21215562 PubMed ID: 11318507

TITLE: Development of an owoh-type product from African yam beans

(Sphenostylis stenocarpa) (Hoechst (ex. A. Rich.) Harms.)

seeds by solid substrate fermentation.

AUTHOR: Ogbonna D N; Sokari T G; Achinewhu S C

CORPORATE SOURCE: Department of Biological Sciences, Rivers State University

of Science and Technology, Nkpolu-Oroworukwo, Port

Harcourt, Nigeria.

SOURCE: PLANT FOODS FOR HUMAN NUTRITION, (2001) 56 (2) 183-94.

Journal code: 8803554. ISSN: 0921-9668.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200108

ENTRY DATE: Entered STN: 20010903

Last Updated on STN: 20010903 Entered Medline: 20010830

African yam beans were fermented to obtain an owoh-type product. Microorganisms associated with the fermentation were Bacillus licheniformis, B. pumilus, B. subtilis and Staphylococcus sp. Total microbial counts increased from $1.53 \times 10(5)$ cfu/g to $1.51 \times 10(9)$ cfu/g under aerobic conditions, and from $8.0 \times 10(3)$ cfu/g to $1.35 \times 10(7)$ cfu/g under conditions of reduced oxygen tension. The pH of the substrate increased throughout the fermentation, from 6.8 to 7.5. A comparison of unfermented seeds with the fermented product showed that there were decreases in the levels of total nitrogen, crude protein, crude fiber and lipids, and that there were increases in the levels of carbohydrate and total organic matter. Enzyme activities during fermentation revealed that amylase production was erratic showing a slight increase during the first 24 h followed by a steep rise in activity in the next 24 h. By contrast, lipase activity increased rapidly throughout the first 72 h while proteinase activity followed a type of sigmoid curve with a steady increase in activity within the first 48 h and a relatively high activity until the 96th h before plunging downwards.

L47 ANSWER 8 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:289619 CAPLUS

DOCUMENT NUMBER: 135:43212

TITLE: Partial characterization of polyfermenticin SCD, a

newly identified bacteriocin of Bacillus

polyfermenticus

AUTHOR(S): Lee, K.-H.; Jun, K.-D.; Kim, W.-S.; Paik, H.-D.

CORPORATE SOURCE: Division of Life Sciences, Kyungnam University, Masan,

631-701, S. Korea

SOURCE: Letters in Applied Microbiology (2001), 32(3), 146-151

CODEN: LAMIE7; ISSN: 0266-8254

PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB Polyfermenticin SCD, a newly identified bacteriocin of **Bacillus** polyfermenticus SCD, was characterized. Polyfermenticin SCD, named tentatively as the bacteriocin produced by B. polyfermenticus SCD, showed a narrow spectrum of activity against Gram-pos. and Gram-neg. bacteria, a yeast and molds. Prodn. of polyfermenticin SCD in a 51 jar fermenter

followed typical kinetics of primary metabolite synthesis. The antibacterial activity of polyfermenticin SCD on sensitive indicator cells disappeared completely by treatment with proteinase K, which indicates its proteinaceous nature. Polyfermenticin SCD seemed to be very stable throughout the pH range of 2.0 to 9.0, and it was relatively heat labile compared with other bacteriocins. Direct detection of polyfermenticin SCD activity on SDS-PAGE suggested that it had an apparent mol. mass of about 14.3 kDa. Bacillus polyfermenticus SCD produced relatively heat-labile polyfermenticin SCD with a narrow spectrum of activity. Bacillus polyfermenticus SCD is a com. probiotic which has been used for the treatment of long-term intestinal disorders. New findings on polyfermenticin SCD will be valuable in the evaluation of com. probiotics. Polyfermenticin SCD can be used to control Bacillus spoilage organisms as a biol. control agent.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 9 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 2000:454247 CAPLUS

DOCUMENT NUMBER: 133:73017

TITLE: Lipase- and protease-producing strain of

Bacillus pumilus and its uses for

wastewater treatment and food processing

INVENTOR(S): Lawler, David; Smith, Steven

PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA

SOURCE: U.S., 11 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 6083737 A 20000704 US 1999-291061 19990414

PRIORITY APPLN. INFO.: US 1999-291061 19990414

AB This invention presents a newly discovered, novel strain of **Bacillus** bacteria that produces **lipase** enzymes for the

degrdn. of oleaginous materials such as fats, greases and cooking oils, and protease enzymes to degrade proteins. This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, animal feed treatment agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 10 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:891510 CAPLUS

DOCUMENT NUMBER: 134:41191

TITLE: Enzyme-producing strain of Bacillus bacteria

INVENTOR(S): Lawler, David; Smith, Steven
PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA

SOURCE: U.S., 11 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

----US 6162635 A 20001219 US 1999-291060 19990414
PRIORITY APPLN. INFO:: US 1999-291060 19990414

AB This invention presents a newly discovered, novel strain of **Bacillus** bacteria that produces **lipase** enzymes for the

degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a no. of

applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 11 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

2000:891509 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 134:41190

Enzyme-producing strain of Bacillus bacteria TITLE:

INVENTOR(S): Lawler, David; Smith, Steven Roebic Laboratories, Inc., USA PATENT ASSIGNEE(S):

SOURCE: U.S., 11 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE _____ ______ US 1999-291059 19990414 US 6162634 20001219 Α PRIORITY APPLN. INFO.: US 1999-291059 19990414 This invention presents a newly discovered, novel strain of

Bacillus bacteria that produces lipase enzymes for the

degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a no. of

applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others.

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 12 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:769007 CAPLUS

DOCUMENT NUMBER: 133:319479

TITLE: Enzyme-producing strain of Bacillus subtilis

INVENTOR(S): Lawler, David; Smith, Steven PATENT ASSIGNEE(S): Roebic Laboratories, Inc., USA

SOURCE: U.S., 11 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English.

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----------US 1999-291058 19990414 US 6140106 A 20001031 PRIORITY APPLN. INFO.: US 1999-291058 19990414

AB This invention presents a newly discovered, novel strain of Bacillus bacteria that produces lipase enzymes for the

degrdn. of oleaginous materials such as fats, greases and cooking oils, protease enzymes to degrade proteins and amylases to break down starch. This novel strain and the enzymes produced thereby have a no. of applications, including wastewater treatments, agricultural uses, laundry and dish detergents, drain cleaners and spot removers, among others. Thus, Bacillus subtilis strain ATCC 202139 was shown to produce

lipolytic, amylolytic, and proteolytic activities by producing zones of clearing on plate diffusion tests.

REFERENCE COUNT: THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS 33 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 13 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 2000:656613 CAPLUS

DOCUMENT NUMBER: 134:146632

TITLE: Microbiological and biochemical changes in the

traditional fermentation of soybean for "soy-daddawa".

Nigerian food condiment

AUTHOR(S): Omafuvbe, B. O.; Shonukan, O. O.; Abiose, S. H. CORPORATE SOURCE: Department of Microbiology, Obafemi Awolowo

University, Ile-Ife, Osun State, Nigeria SOURCE: Food Microbiology (2000), 17(5), 469-474

CODEN: FOMIE5; ISSN: 0740-0020

PUBLISHER: Academic Press DOCUMENT TYPE: Journal LANGUAGE: English

AB The traditional prodn. of "daddawa" from the fermn. of soybean involves predominantly Bacillus species notably B. subtilis, B. licheniformis, and B. pumilus. Although Micrococcus luteus and Staphylococcus epidermidis were present in relatively low nos. at the onset of fermn., they do not appear to play any major role in the fermn. process. The bacterial population, pH, and moisture content increased with fermn. The titratable acidity increased in the first 24 h and then dropped as fermn. progressed. Amylase activity increased rapidly with fermn. attaining a peak at 48 h with a concomitant decrease in total sol. sugar level while the reducing sugar increased in the first 24 h and dropped. Protease activity also increased rapidly in the first 36 h and dropped giving higher amts. of free amino acids with fermn.

Lipase and .beta.-fructofuranosidase activities were minimal in

the fermenting seeds. (c) 2000 Academic Press.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 14 OF 32 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN DUPLICATE 5

ACCESSION NUMBER: 2000:232357 SCISEARCH

THE GENUINE ARTICLE: 295PX

TITLE: Physiology of dairy-associated Bacillus spp.

over a wide pH range

AUTHOR: Lindsay D (Reprint); Brozel V S; Mostert J F; vonHoly A

CORPORATE SOURCE: UNIV WITWATERSRAND, DEPT MOL & CELL BIOL, PRIVATE BAG 3,

ZA-2050 WITWATERSRAND, SOUTH AFRICA (Reprint); UNIV

PRETORIA, DEPT MICROBIOL & PLANT PATHOL, ZA-0001 PRETORIA,

SOUTH AFRICA

COUNTRY OF AUTHOR: SOUTH AFRICA

SOURCE: INTERNATIONAL JOURNAL OF FOOD MICROBIOLOGY, (10 MAR 2000)

Vol. 54, No. 1-2, pp. 49-62.

Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE

AMSTERDAM, NETHERLANDS.

ISSN: 0168-1605.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: AGRI

LANGUAGE: English
REFERENCE COUNT: 41

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

Bacillus species isolated from alkaline wash solutions used fur cleaning in place in South African dairy factories have been suggested to contaminate product contact surfaces of dairy processing equipment and result in post-pasteurization spoilage of milk and milk products. Growth and attachment of such Bacillus isolates under alkaline and acidic conditions have not been previously described. Therefore, the in vitro growth temperature and pH ranges, attachment abilities and hydrophobicity, and enzyme production capabilities of four Bacillus isolates (tentatively identified as B. subtilis 115, B. pumilus 122 B. licheniformis 137 and B. cereus 144) previously isolated from the alkaline wash solutions in a South African dairy were examined. Growth pH ranges were determined in buffered Standard One-like Nutrient Broth and in unbuffered 1% Milk Medium at pH values ranging fr om 3 to 12. Growth and attachment to stainless steel surfaces and production of protease and lipase enzymes were determined in 1% Milk Medium at pH 4, 7 and 10. Colony hydrophobicity of each isolate by the Direction of Spreading Method (DOS) was also determined at pH 4, 7 and 10. In addition, Arrhenius plots were used to examine the growth temperature ranges of the isolates. All isolates grew at pH values ranging from 4.5 to 9.5 in buffered Standard One-like Nutrient Broth, and from pH 4 to 10 in 1% Milk Medium. All isolates also attached to stainless steel at pH 3, 7 and 10 in 1% Milk Medium. Generally the attachment of B. subtilis 115, B. pumilus 122 and B. licheniformis 137 to stainless steel surfaces was enhanced at pH 1 and 10, compared to pH 7. By contrast, the best attachment of B. cereus 144 cells to stainless steel surfaces was at pH 7. Planktonic and attached cells of all isolates produced proteolytic enzymes at pH 7 and 10, but not at pH 4. Similarly, planktonic and attached cells of B. subtilis 115. B. pumilus 122 and B. licheniformis 137 produced lipolytic enzymes at pH 7 and 10, and weak lipolysis was observed at pH 4. The Bacillus cereus 144 isolate showed no lipolytic activity at pH 10. All isolates exhibited low hydrophobic properties at

all pH values even though attachment to stainless steel at the same pH values occurred. None of the isolates flew below 11 degrees C or above 56 degrees C, and optimum growth temperatures were in the high mesophilic range (36-44 degrees C). (C) 2000 Elsevier Science B.V. All rights reserved.

L47 ANSWER 15 OF 32 LIFESCI COPYRIGHT 2003 CSA on STN

ACCESSION NUMBER: 2001:35645 LIFESCI

TITLE: Enzyme-producing strain of Bacillus

pumilus

AUTHOR: Lawler, D.; Smith, S. CORPORATE SOURCE: Roebic Laboratories, Inc.

SOURCE: (20000704) . US Patent: 6083737; US CLASS: 435/252.5;

210/601; 210/602; 426/2; 426/442; 426/807; 435/252.4;

435/262.5; 435/832.

DOCUMENT TYPE: Patent FILE SEGMENT: W2 LANGUAGE: English SUMMARY LANGUAGE: English

This invention presents a newly discovered, novel strain of

Bacillus bacteria that produces lipase enzymes for the degradation of oleaginous materials such as fats, greases and cooking oils, and protease enzymes to degrade proteins. This novel strain and the enzymes produced thereby have a number of applications, including wastewater treatments, agricultural uses, laundry and dish detergents,

drain cleaners and spot removers, among others.

L47 ANSWER 16 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:384075 CAPLUS

DOCUMENT NUMBER: 131:22909

Degradation of biodegradable polymers with bacteria or TITLE:

bacterial enzymes

INVENTOR(S): Koch, Rainhard; Wiegand, Simone

PATENT ASSIGNEE(S): Bayer A.-G., Germany SOURCE: Ger. Offen., 8 pp. CODEN: GWXXBX

Patent

DOCUMENT TYPE: LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT	NO.		KI	4D	DATE			Α	PPLI	CATI	ON N	0.	DATE				
									_									
DĒ	DE 19754063			A.	1	1999		DE 1997-19754063				063	19971205					
WO	9929	885		A.	A1 19990617				WO 1998-EP7610				0	19981125				
	W:	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
		DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	ΗU,	ID,	· IL,	IS,	JP,	ΚE,	
		KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	
		MX,	NO,	NΖ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	
		TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZW,	ΑM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ES,	
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	
		CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG							
AU	9918	755		A.	1	1999	0628		Αl	J 19	99-1	8755		1998	1125			
PRIORITY APPLN. INFO.: DE 1997-19754063 19971205																		

WO 1998-EP7610

19981125

The use of Paenibacillus lautus, Bacillus pumilus, Aeromicrobium, Thermobispora bispora, Brevibacillus, and Bacillus or esterases, lipases, and oligoamidases from these bacteria to degrade biodegradable polymers is disclosed. The biodegradable polymers are aliph. or partially arom. polyesters, thermoplastic aliph. or partially arom. polyesterurethanes, aliph./arom. polyestercarbonates, or aliph. or partially arom. polyesteramides. The degrdn. of granules of a polyesteramide composed of 60 wt.% caprolactam and 40 wt.% adipic acid-butanediol ester with Thermobispora bispora and Aeromicrobium was demonstrated.

L47 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 6

ACCESSION NUMBER: 2000:34126 CAPLUS

DOCUMENT NUMBER: 132:133961

Purification and characterization of an extracellular TITLE:

lipase from a newly isolated thermophilic

Bacillus pumilus

Jose, Joyce; Kurup, G. Muraleedhara AUTHOR(S):

School of Biosciences, Mahatma Gandhi University, CORPORATE SOURCE:

Kottayam, 686 560, India

Indian Journal of Experimental Biology (1999), 37(12), SOURCE:

1213-1217

CODEN: IJEBA6; ISSN: 0019-5189

PUBLISHER: National Institute of Science Communication, CSIR

DOCUMENT TYPE: Journal LANGUAGE: English

An extracellular lipase was isolated and purified from B.

pumilus. This was the 1st lipase isolated from this

organism. The effects of temp., pH, and compn. of the culture medium were optimized for max. lipase prodn. The enzyme was purified, and the purity was found to be 98%. The Km of the enzyme was 1.75 .times.

10-2 mg. and the enzyme was found to be a monomer by SDS-PAGE. This

lipase was found to be alk. and thermostable and was not a

metalloprotein as evidenced from EDTA treatment. Immobilized whole cells

were found to be more stable than the pure enzyme.

THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 18 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 18 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 7

ACCESSION NUMBER:

1999:367610 CAPLUS

DOCUMENT NUMBER:

131:181510

TITLE:

Molecular characterisation of the gene encoding an

esterase from Bacillus licheniformis sharing

significant similarities with lipases

AUTHOR(S):

Alvarez-Macarie, E.; Augier-Magro, V.; Guzzo, J.;

Baratti, J.

CORPORATE SOURCE:

Biocatalysis and Fine Chemistry group, CNRS ESA 6111, Faculte des Sciences de Luminy, Marseille, 13288, Fr.

SOURCE: Biotechnology Letters (1999), 21(4), 313-319

CODEN: BILED3; ISSN: 0141-5492

PUBLISHER:

Kluwer Academic Publishers

DOCUMENT TYPE:

Journal

LANGUAGE: English

An esterase gene from the moderate thermophilic strain Bacillus

licheniformis LCB40 was cloned and expressed in Escherichia coli. Comparison of the amino acid sequence of the esterase with those of known

lipases and esterases showed the presence of the well-conserved

Gly-X-Ser-X-Gly pentapeptide, with an alanine replacing the first glycine.

This substitution has never been reported for an esterase but it is

present in the lipases from Bacillus subtilis,

Bacillus pumilus and Galactomyces candidum. The amino

acid sequence showed similarities with lipases and with

mammalian lecithin-cholesterol acyltransferases and no similarities with esterases. The enzyme activity of a crude ext. from a recombinant Escherichia coli strain showed hydrolysis of p-nitrophenyl caprylate (pNPC8) as for esterases, but not of p-nitrophenyl palmitate (pNPC16) or

original property of assocq. the activity of an esterase with a primary

sequence showing high similarity with lipases.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS

olive oil such as for lipases. Thus, the enzyme displays the

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 19 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1999:81959 CAPLUS

DOCUMENT NUMBER:

130:99954

TITLE: INVENTOR(S): Biological product for treating wastewater

Knapen, Guy

PATENT ASSIGNEE(S): Bevil S.P.R.L., Belg. SOURCE: Fr. Demande, 9 pp.

CODEN: FRXXBL

DOCUMENT TYPE:

Patent French

LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO. DATE

_____ FR 1998-7116 19980605

FR 2762835 A3 19981106 FR 2762835 B3 19991210 B3

PRIORITY APPLN. INFO.: BE 1997-65 19970122

AB The compn. for treating wastewater in-situ, e.g., in sewers, comprises .gtoreq.1 bacteria, .gtoreq.1 hydrolysis enzyme, and .gtoreq.1 compression agent, and is extruded into small sticks and/or pellets. The forms may also contain nutrients and/or detergents.

L47 ANSWER 20 OF 32 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 2002:20096 BIOSIS DOCUMENT NUMBER: PREV200200020096

TITLE: Alkaline bacillus lipases, coding DNA

sequences therefor and bacilli, which produce

these lipases.

Moeller, B.; Vetter, R.; Wilke, D.; Foullois, B. AUTHOR(S):

CORPORATE SOURCE: Hanover Germany

ASSIGNEE: KALI-CHEMIE AKTIENGESELLSCHAFT

PATENT INFORMATION: US 5427936 June 27, 1995

Official Gazette of the United States Patent and Trademark

Office Patents, (June 27, 1995) Vol. 1175, No. 4, pp. 2473.

ISSN: 0098-1133.

DOCUMENT TYPE: Patent LANGUAGE: English

L47 ANSWER 21 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:909766 CAPLUS

DOCUMENT NUMBER: 123:337920

The role of Bacillus species in the TITLE:

fermentation of cassava

AUTHOR(S): Amoa-Awua, W.K.A.; Jakobsen, M.

Food Research Institute, Council for Scientific and CORPORATE SOURCE:

Industrial Research, Accra, Ghana

SOURCE: Journal of Applied Bacteriology (1995), 79(3), 250-6

CODEN: JABAA4; ISSN: 0021-8847

PUBLISHER: Blackwell DOCUMENT TYPE: Journal LANGUAGE: English

Cassava dough inoculum is added to grated cassava in order to achieve a modification of texture during fermn. into the fermented cassava meal, agbelima. The microflora of two different types of inocula and subsequently inoculated cassava mash at 0, 24, and 48 h of fermn. were examd. in order to det. the mechanism responsible for the breakdown of cassava tissue. Bacillus spp. occurred in high nos., 107-108 colony-forming units (cfu)/g, in both types of inocula and persisted throughout the cassava dough fermn. **Bacillus** spp. found were B. subtilis, B. mycoides, B. pumilus, B. cereus, B. amyloliquefaciens, and B. licheniformis, with B. subtilis accounting for

more than half of Bacillus isolates. All Bacillus isolates produced a wide spectrum of enzymes and showed similar enzymic

activities, but only B. pumilus, B. licheniformis, and B. amyloliquefaciens produced linamarase. Some isolates produced the

tissue-degrading enzymes polygalacturonase and pectin esterase and nearly all isolates hydrolyzed starch. All isolates showed cellulase activity and were able to disintegrate cassava tissue. When cassava pieces were incubated in amylase, cellulase, pectin esterase, and polygalacturonase solns., only pieces in cellulase soln. were dissolved revealing that the breakdown of cassava dough texture during fermn. with the inocula examd. is brought about by ${\bf Bacillus}\ {\bf spp.}\ {\bf through}\ {\bf cellulase}\ {\bf activity.}$

L47 ANSWER 22 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 8 ACCESSION NUMBER: 1994:506910 CAPLUS

DOCUMENT NUMBER: 121:106910

TITLE: Microflora and their enzyme profile in "Terasi"

AUTHOR(S): Surono, Ingrid S.; Hosono, Akiyoshi

CORPORATE SOURCE: United Graduate Scholl Agricultural Science, Gifu

University, Gifu, 501-11, Japan

SOURCE: Bioscience, Biotechnology, and Biochemistry (1994),

58(6), 1167-9

CODEN: BBBIEJ; ISSN: 0916-8451

DOCUMENT TYPE: Journal LANGUAGE: English

Terasi starter was composed of Bacillus brevis, Bacillus

pumilus, Bacillus megaterium, Bacillus

coaqulans, Bacillus subtilis, and Micrococcus kristinae in the proportion of 39.1%, 26.1%, 8.7%, 8.7%, 8.7%, and 8.7%, resp. Most of the

isolates showed high esterase (C4) and esterase lipase

activities (C8).

L47 ANSWER 23 OF 32 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN DUPLICATE 9

ACCESSION NUMBER: 93:489660 SCISEARCH

THE GENUINE ARTICLE: LQ670

IDENTIFICATION OF SOME BACTERIA FROM PADDY ANTAGONISTIC TO TITLE:

SEVERAL RICE FUNGAL PATHOGENS

ROSALES A M (Reprint); VANTOMME R; SWINGS J; DELEY J; MEW AUTHOR:

INT RICE RES INST, LOS BANOS, PHILIPPINES (Reprint); STATE CORPORATE SOURCE:

UNIV GHENT, MICROBIOL MICROBIELE GENET LAB, B-9000 GHENT,

BELGTUM

COUNTRY OF AUTHOR: PHILIPPINES; BELGIUM

SOURCE:

JOURNAL OF PHYTOPATHOLOGY-PHYTOPATHOLOGISCHE ZEITSCHRIFT,

(JUL 1993) Vol. 138, No. 3, pp. 189-208.

ISSN: 0931-1785.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: AGRI LANGUAGE: ENGLISH REFERENCE COUNT: 27

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

The effect of 23 bacterial strains from ricefields in the tropics on rice seed germination and on radicle and hypocotyl development of four rice cultivars was determined. There was a varietal difference in response to seed bacterization with the different bacterial strains. Germination of cv. IR58 increased from 78 to 93 %, that of $\dot{c}v$. IR64, from 89 to 97 %. Less effects on germination of cvs IR42 and IR36 were observed. All strains inhibited the mycelial growth of Rbizoctonia solani in vitro. The three strains, identified as Bacillus subtilis, inhibited the mycelial growth of eight fungal pathogens whereas the other strains were pathogen-specific. Seed bacterization with these bacterial strains provided a sheath blight protection of 4.5 to 73 % in the glasshouse trial. These 23 bacterial strains were identified by phenotypic tests using the API systems, morphological and biochemical features, and by comparison of electrophoretic patterns after sodium dodecyl sulphate polyacrylamide qel electrophoresis. Bacterial strains were identified (number of strains in brackets) as: Bacillus subtilis (3), Bacillus laterosporus (1), Bacillus pumilus

(1), Pseudomonas aeruginosa (7), Pseudomonas belonging to section 1 (5), Erwina herbicola-like (1), and Serratia marcescens (1). The features of the other four strains were similar to Serratia except for the DNAase and lipase activities.

L47 ANSWER 24 OF 32 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 1993:342203 BIOSIS DOCUMENT NUMBER: PREV199396039203

TITLE: Studies on thermostable alkaline lipase in

Acinetobacter calcoaceticus.

Shi, Qiaoqin; Chen, Ruoyin; Xu, Qingyi; Wu, Songgang AUTHOR(S): Inst. Microbiol. Engineering, Fujian Normal Univ., Fuzhou CORPORATE SOURCE:

350007 China

SOURCE: Acta Microbiologica Sinica, (1992) Vol. 32, No. 6, pp.

425-431.

DOCUMENT TYPE: Article Chinese

SUMMARY LANGUAGE: Chinese; English

A bacteria strain F-1903 was isolated from Fujian province soil, which produced alkaline lipase with high activity and high activating temperature. The medium for the strain to produce lipase was composed of (%): soy bean meal 2.0, corn-steep liquor 7.0, dextran 1.0, K-2HPO-4 0.5, NaNO-3 0.5. The optimal conditions for lipase production were initial pH 7.0, culture temperature 26 degree C for 28h. The enzyme activity is optimal at pH 9.2 and at 54 degree C, which was increased by Ca-2+, while inhibited by EDTA.

L47 ANSWER 25 OF 32 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN DUPLICATE 10

ACCESSION NUMBER: 93:85219 SCISEARCH

THE GENUINE ARTICLE: KK675

TITLE: OCCURRENCE OF BACILLUS-CEREUS AND OTHER

BACILLUS SPECIES IN INDIAN SNACK AND LUNCH FOODS AND THEIR ABILITY TO GROW IN A RICE PREPARATION

AUTHOR: VARADARAJ M C (Reprint); KESHAVA N; DEVI N; DWARAKANATH C

T; MANJREKAR S P

CORPORATE SOURCE: CENT FOOD TECHNOL RES INST, DISCIPLINE MICROBIOL &

SANITAT, MYSORE 570013, KARNATAKA, INDIA (Reprint)

COUNTRY OF AUTHOR: INDIA

SOURCE: JOURNAL OF FOOD SCIENCE AND TECHNOLOGY-MYSORE, (NOV/DEC

1992) Vol. 29, No. 6, pp. 344-347.

ISSN: 0022-1155.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: LANGUAGE: AGRI ENGLISH

REFERENCE COUNT:

No References Keyed

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Bacillus brevis, B. cereus, B. circulans, B. coagulans, B.

laterosporus, B. licheniformis, B. pumilus, B. stearothermophilus and B. subtilis were isolated from Indian snack and lunch foods. Higher count of 4.2 log10 (cfu/g) and a lower count of 2.6 log10 (cfu/g) were observed in bisibele bhath and uppuma, respectively. 'rhe isolated cultures were positive for production of either one or more of the following: hemolysins, phospholipase, protease, lipase and amylase. A few selected cultures of Bacillus species occurring as post-processing contaminants in plain cooked rice reached cell populations which were sufficient to cause health hazards. These findings indicate the significance of Bacillus species as post-processing contaminants in processed foods.

L47 ANSWER 26 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1992:35661 CAPLUS

DOCUMENT NUMBER:

116:35661

TITLE:

Alkaline lipases from Bacillus and

the cloning of their genes

INVENTOR(S):

Moeller, Bernhard; Vetter, Roman; Wilke, Detlef;

Foullois, Birgit

PATENT ASSIGNEE(S):

Kali-Chemie A.-G., Germany

SOURCE:

Ger. Offen., 29 pp. CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE: GEFAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT NO.		KIND	DATE	APPLICATION NO. DATE
DE	4111321		A1	19911017	DE 1991-4111321 19910408
WO	9116422		A1	19911031	WO 1991-EP664 19910408
	W: JP	, KR,	US		
	RW: AT	, BE,	CH, DE,	, DK, ES,	FR, GB, GR, IT, LU, NL, SE
EP	528828		A1	19930303	EP 1991-908155 19910408
EP	528828		B1	19940615	
	R: AT	, BE,	CH, DE,	, DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE
JP	0550593	9	T2	19930902	JP 1991-507473 19910408
JP	3112937		B2	20001127	
ES	2055601		Т3	19940816	ES 1991-908155 19910408
US	5427936		А	19950627	US 1992-930678 19921013
PRIORITY	Y APPLN.	INFO.	:		DE 1990-4012070 A1 19900414
					WO 1991-EP664 W 19910408

AB Lipases with alk. pH optima that are useful for laundry detergents are identified in isolates of Bacillus pumilus and the genes cloned for manuf. of the enzyme in a suitable host. Olive oil-degrading bacteria were isolated from fatty foods (rancid butter, cheese, or pork fat) and assayed for lipase in plate tests. Three high-level lipase secretors were isolated and found to be novel B. pumilus. The lipase genes were cloned by expression in B. subtilis with transformants showing

.apprx.50-fold more extracellular lipase activity than controls. Introducing the plasmids back into B. pumilus resulted in lipase yields of 112-224 lipase units/mL medium. The enzymes all have a temp. optimum of 30-40.degree., a pH optimum of .apprx.10 and are moderately temp.-stable. In IEC test borate laundry detergents the novel lipases removed 43-45.5% of the olive oil in a stain from test swatches. The lipase was stable in the presence of alk. proteinases used in detergents.

L47 ANSWER 27 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 11

ACCESSION NUMBER: 1991:20708 CAPLUS

DOCUMENT NUMBER: 114:20708

TITLE: Enzymic activity of **bacilli** perspective for inclusion into composition of biopreparation

AUTHOR(S): Slabospitskaya, A. T.; Krymovskaya, S. S.; Reznik, S.

R.

CORPORATE SOURCE: Inst. Microbiol. Virol., Kiev, USSR

SOURCE: Mikrobiologicheskii Zhurnal (1978-1993) (1990), 52(2),

9-14

CODEN: MZHUDX; ISSN: 0201-8462

DOCUMENT TYPE: Journal LANGUAGE: Russian

AB The enzymic activity (amylase, protease, lipase, pectolytic and cellulase) was studied in 5 strains of aerobic spore-forming bacteria (Bacillus subtilis, B. licheniformis, B. coagulans, B. pumilis, B. badius) being of interest for creation of medical and prophylactic biopreparations. The above-mentioned enzymes were found in some studied strains. This may provide participation of bacilli in the degrdn. processes of a no. of substrates in the digestive tract of humans and animals and is an advantage of prepns. from the genus Bacillus as compared with available biopreparations of other microbial cultures for prophylaxis and treatment of gastrointestinal diseases.

L47 ANSWER 28 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1990:53934 CAPLUS

DOCUMENT NUMBER: 112:53934

TITLE: Bacteria involved in the deterioration of Nigerian

palm oil under storage

AUTHOR(S): Odunfa, S. A.

CORPORATE SOURCE: Dep. Bot. Microbiol., Univ. Ibadan, Ibadan, Nigeria SOURCE: International Biodeterioration (1989), 25(6), 393-405

CODEN: INBIEA; ISSN: 0265-3036

DOCUMENT TYPE: Journal LANGUAGE: English

AB The percentage of lipolytic bacterial colonies in samples of good-grade palm oil varied from 0 to 26%, while in the deteriorated oil it was 52-73%. The organisms isolated and their percentage frequencies were: Bacillus subtilis, 43%; B. pumilus, 31%; B. laterosporus 14%; B. megaterium, 6%; and B. brevis 6%. B. subtilis and B. pumilus were the only species with pronounced lipolytic activities. Over the range 25-40.degree., temp. had a profound effect on the lipolytic activities of these 2 species. The deterioration of the palm oil was ascribed to improper processing which leaves traces of water in the oil and also to postprocessing contamination from the use of previously used containers and from unhygienic handling during transport and marketing.

L47 ANSWER 29 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1987:420674 CAPLUS

DOCUMENT NUMBER: 107:20674

TITLE: Viable microorganism detection by induced fluorescence

INVENTOR(S): Snyder, A. Peter; Greenberg, David B.; Scarpino,

Pasquale V.

PATENT ASSIGNEE(S): University of Cincinnati, USA

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -------------WO 8605206 A1 19860912 WO 1986-US375 19860224

W: JP

RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE

EP 215066 A1 19870325 EP 1986-901682 19860224

R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE

PRIORITY APPLN. INFO.: US 1985-706160 19850227

Rapid detection and identification of viable microorganisms is performed by reaction of their extracellular enzymes with a nonfluorescent dye to produce a fluorescent product. By exposing the same microbial sample to a no. of different nonfluorescent dyes, a pattern of fluorescence induction emerges. Comparison to std. microorganism fluorescence responses by pattern recognition anal. is used for organism identification. The concn. of microorganisms is estd. from the rate of fluorescence generation. Substrates used in tests on suspensions of various microorganisms were: (a) diacetylfluorescein, indoxyl acetate derivs., and .beta.naphthylacetate as probes for lipase/esterase, (b) 4-methylumbelliferyl and 3-indoxylphosphate as probes for phosphatase, (c) 4-methylumbelliferyl-.beta.-D-galactoside as a probe for .beta.-D-galactosidase, and (d) indoxyl-.beta.-D-glucoside, 4-methylumbelliferyl-.beta.-D-glucoside, and 6-bromo-2-naphthyl-.beta.-Dglucoside as probes for .beta.-D-glucosidase.

L47 ANSWER 30 OF 32 MEDLINE on STN DUPLICATE 12

ACCESSION NUMBER: 82097228 MEDLINE

DOCUMENT NUMBER: 82097228 PubMed ID: 7033138

TITLE: Bacillus pumilus in the induction of

clindamycin-associated enterocolitis in guinea pigs.

AUTHOR: Brophy P F; Knoop F C

CONTRACT NUMBER: RR05390 (NCRR)

SOURCE: INFECTION AND IMMUNITY, (1982 Jan) 35 (1) 289-95.

Journal code: 0246127. ISSN: 0019-9567.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198203

ENTRY DATE: Entered STN: 19900317

> Last Updated on STN: 19970203 Entered Medline: 19820322

AB Antibiotic-associated enterocolitis was induced in guinea pigs by the intraperitoneal injection of clindamycin. The colonic and cecal mucosa and feces of acutely ill animals were cultured under aerobic and anaerobic conditions on 5% sheep blood agar plates and on a selective and differential medium for Clostridium difficile. All morphologically distinct colony types were isolated in pure culture and identified. A sterile cell-free filtrate of each isolate was tested for ability to induce morphological changes in cultured monolayers of mouse adrenal cells. The filtrate of a predominant isolate, Bacillus pumilus, induced an alteration of cellular morphology; the sterile filtrate of other isolates were unreactive. Toxin contained in cell-free filtrates of B. pumilus caused a syndrome identical to clindamycin-associated enterocolitis when injected intracecally into guinea pigs. The toxin had a molecular weight of 6,500 daltons as determined by molecular sieve chromatography and was inactivated with pronase, lipase, and trypsin. The minimal inhibitory concentrations of clindamycin and vancomycin for B. pumilus were 50 micrograms/ml and less than or equal to 0.4 micrograms/ml, respectively.

L47 ANSWER 31 OF 32 CAPLUS COPYRIGHT 2003 ACS on STN

1981:188319 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 94:188319

TITLE: Lipolytic activity of Bacillus

pumilus

AUTHOR(S): Mourey, A.

CORPORATE SOURCE: Lab. Bot. Microbiol., Fac. Sci., Nancy, 54037, Fr. SOURCE: Revue Francaise des Corps Gras (1981), 28(2), 55-8

CODEN: RFCGAE; ISSN: 0035-3000

DOCUMENT TYPE: Journal LANGUAGE: French

Lipolytic activity is localized in the cells of B. pumilus during all phases of the growth curve. Treatment of the cells with lysozyme without sucrose is more effective in releasing these lipolytic enzymes than treatment with lysozyme plus sucrose, sonication, or grinding with glass beads. Lipolytic enzymes are more readily released from 109-phase cells than stationary-phase cells.

L47 ANSWER 32 OF 32 MEDLINE on STN DUPLICATE 13

ACCESSION NUMBER: 79017402 MEDLINE

PubMed ID: 696046 DOCUMENT NUMBER: 79017402

Sensitivity to lytic agents and DNA base composition of TITLE:

several aerobic spore-bearing bacilli.

Candeli A; Mastrandrea V; Cenci G; De Bartolomeo A AUTHOR: ZENTRALBLATT FUR BAKTERIOLOGIE, PARASITENKUNDE, SOURCE:

INFEKTIONSKRANKHEITEN UND HYGIENE. ZWEITE

NATURWISSENSCHAFTLICHE ABTEILUNG: MIKROBIOLOGIE DER LANDWIRTSCHAFT DER TECHNOLOGIE UND DES UMWELTSCHUTZES,

(1978) 133 (3) 250-60.

Journal code: 8000422. ISSN: 0323-6056. GERMANY, EAST: German Democratic Republic

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

LANGUAGE: English

Priority Journals FILE SEGMENT:

ENTRY MONTH:

PUB. COUNTRY:

197811 Entered STN: 19900314 ENTRY DATE:

Last Updated on STN: 19900314 Entered Medline: 19781118

The authors studied the possible relationship between a genetic characteristic, like DNA base composition, and certain phenotypic characteristics, i.e., sensitivity to lytic agents, morphology of colonies, and biochemical reactions in 34 strains of spore-bearing bacilli. From the results obtained two groups of bacilli have been identified. The first group includes the species B. subtilis, B. pumilus, B. licheniformis, and B. firmus and one strain of B. megaterium. The mean value of the GC% of the DNA is 44.22 +/-1.76. All the strains examined are highly sensitive to lysozyme and resistant to sodium lauryl sulphate (S.L.S.); the surface colonies have a "rhizoid" appearance and the microcolonies on slide microculture are star-shaped. The second group includes the species B. cereus, B. cereus var. mycoides, B. anthracis, and B. thuringiensis. The mean value of the GC% of the DNA is 33.65 +/- 0.59. All the strains belonging to this group are resistant to both lysozyme and S.L.S., and the surface macro-colonies and the microcolonies have a "medusae head" appearance. The two groups also have certain different biochemical reactions; e.g., anaerobic growth and the egg yolk reaction, with few exception, are negative for the first group and positive for the second; furthermore, the strains in the first group (with rare exceptions) cause fermentation in the three carbohydrates, glucose, arabinose, and xylose, while glucose only is fermented by all strains with one exception in the second group. The position of B. megaterium is not yet clear, although one strain may certainly be included in the first group. Lysis by lipase is extremely variable and does not correlate with any of the other characteristics studied. The other species studied in relation to the characteristics, considered in our research (B. coagulans, B. macerans, B. polymyxa, B. laterosporus, B. alvei, B. circulans, B. stearothermophilus, and B. brevis), are not susceptible to grouping, either in the first, or in the second or even in a separate group.